TITLE PAGE.

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o n

H Y S T E R I A.

by

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H Y S T E R I A.

D E F I N I T I O N A N D G E N E R A L C O N S I D E R A T I O N S.

The term "hysteria" may be understood as referring to a functional disease of the cerebro-spinal system, characterised by either special mental symptoms or by motor, sensory, vaso-motor, or visceral disorders, which to abnormal psychical conditions are in varying degree related. In such a category we can distinguish a group of symptoms and of syndromes, some of which are paroxysmal, others more or less permanent: to the latter the term "stigmata" has been applied.

There is scarcely a definition so far devised that can be regarded as entirely satisfactory: all are more or less faulty or incomplete. The disease is not an abnormal ideation, although this if often prominent; it is not an emotional exaltation, although this may be a striking element; it is not a perversion of reflexes and of sensation, athough these may be present. Some insist that it is a disease of the uterus, others an affection of the ovaries; some look upon it is of cerebral origin; some say it is a disease of the nerves, and many consider it as a true psychosis. Hysterical patients are, by Sir James Paget (Clinical Lectures on the Nervous Mimicry of Organic Diseases, Lancet, October, November, and December, 1873), likened to those who are colour-blind, the volitional powers being mainly affected. A true paralysis of the will, however, occurs in non-hysterical patients, of both sexes; and although this explanation is tolerably clear, it is not such as throws any light upon the pathogeny of the disease. The presence of a spasmodic seizure or paroxysm is made the central and essential feature in many definitions; but hysterical cases pass through the whole course of the disease without suffering from spasm of any kind, although convulsions very often occur. A definition, well considered, in a general neurosis, should allow of the discussion of of the subject, to a large extent at least, being guided and controlled. In the present state of our knowledge the only stand that can be taken is that expressed in the definition which I have given, viz., that hysteria is a functional affection. It is claimed that, in a strict sense, no disease can be regarded as functional in reference to affections in which disordered action, without permanent alteration of structure, is present. Still, no anatomical lesions have been found which can be regarded as strictly accounting for the hysterical condition,-

though temporary structural alterations must sometimes be present in hysteria;organic disease may be a complication in special cases; post-mortem appearances may occasionally be found as accidents or coincidences. Unless we regard the cerebro-spinal axis as the starting-point,or active agency in their propagation,it is impossible to explain the mental,motor,sensory,and other phenomena.Not only do we include under the term vaso-motor,in its broad sense, peripheral vascular disturbances,but also cardiac,respiratory,secretory,and excretory affections of varying type.Some of these disorders are also visceral,but such hysterical phenomena as abdominal phantom tumours,hysterical tympanitis,etc., are also included amongst the visceral phenomena of the disease.I am most inclined to accept the view of J.H. Lloyd (Hysteria:A Study in Psychology - Jour.of Nervous and Mental Disease,vol.x.,No.4,Oct.,1883),who, sustained in his arguments by others, says that he does not look upon every case of hysteria as a case of insanity in the technical sense,but believes that a psychical element is,or has been,present,even when the manifestations of the disorder are pre-eminently psychical.At first sight,that all hysterical phenomena are related in varying degree to abnormal psychical conditions may,perhaps,be regarded as open to grave doubt and dispute.It is questionable whether,in every case of hysteria,the relation of the symptoms to psychical states could be easily demonstrated.Chambers (Brit.Med.Jour.,Dec.21,1861,651) aptly remarks that hysteria "has no more to do with the organs of reproduction than with any other of the female body;and it is no truer to say that women are hysterical because they have wombs,than that men are gouty because they have beards".So thoroughly in accord is my own opinion with this,that I have intentionally ignored the absurd ancient view of the uterine origin of hysteria in my definition of the malady.

N O M E N C L A T U R E, H I S T O R Y, A N D G E O G R A P H Y.

The term "hysteria" is derived from the Greek "ustera",the uterus;being time-honoured in the use, it can scarcely be discarded.The malady is also called the "Vapours",and "Hysterics".Numerous synonyms have been used for the malady,the most of which have reference,unfortunately,to the supposed uterine origin of the affection - as,for instance,Uteri adsensus, Asthma uteri,Vapores uterini,Passio hysterica,Strangulatio uterina seu Vulvae. Some French synonyms are Maladie imaginaire,Entranglement,and Maux ou attaques de nerfs.Other French synonyms,besides these, have been used;most of them are translations from the Latin, having reference also th the uterine hypothesis.In the English language it is rare to have any other

single word used as a synonym for hysteria.Sir James Paget (loc.cit.) introduced the term "neuromimesis", or nervous mimicry,and suggested that it should be substituted for hysteria,and "neuromimetic" for hysterical.Neuromimesis is,however,not a true synonym. Many cases of hysteria are cases of neuromimesis,but they are not all of this character.Among the other unsatisfactory attempts which have been made to originate a new name for hysteria is that of Metcalfe Jihnson (Med.Times and Gaz.,1872,ii.,612),who proposes to substitute the term "ganglionism",as giving a clue to the pathology of hysteria.It is a misleading half-truth,his main idea being that hysteria exhibits a train of symptoms which are almost always referable to the sympathetic or ganglionic nervous system.

Our knowledge of hysteria goes back to the earliest ages of medicine - far beyond the Christian era.There is mention of it,among the diseases of the nervous system,in the very oldest Brahminical writings on medicine (Wise - Commentary on the Hindu System of Medicine,London,1860,250),wherein the malady is referred to under the name of "gluma". Hysteria is described,under the names "pux usterike" and"apnoia usterike", in the writings of the Greek physicians (Cnidos - De morbis mulierum,lib.i.,cap. vii.,and lib.ii.,cap.cxxiii.; Hippocrates - Op.,viii., 23,266,326; Celsus - lib.iv.,cap.xx.;Aretaeus - De causis et signis acut.morb.,lib.ii.,cap.xi.; Galenos - De locis affect.,lib.,vi.,cap.v.,and De compos. medicament.secund.locos,lib.ix.,cap.x.; Hipp.Libr.de humoribus,Comment.,i.,cap.xix.,viii.,413,xvi.,177; Aëtius - lib.xvi.,cap.lxx.-lxxiii.,1535,iii.,151; Paulus - lib.iii.,cap.lxxi,1551,286 u.a.), who looked upon it as the effect of a cramp-like contraction of the uterus,or of displacement of the uterus,- wandering of that organ within the body even as high as the neck,in order to account,as it would seem,for the globus hystericus,- or as a result of "duscrasia" due to the retention of the male seed,or of the maternal blood ("ob retenta menstrua vel semen cohibitum",Galen);or of some other putrescent matter within the womb (Paulus),being in that view a malady pertaining exclusively to the female sex (Galen).The same views will be seen to be held by the Arabian writers (Avicenna - Canon,lib.iii.,fen.xi.,tract iv.,cap.xvi., ed.Venet.,1564,i.,942; Haly Abbas - Lib.theoric.,ix., cap.xxxviii.,Lib.pract.,viii.,cap.xii.,ed.Lugd.,1523, 120,264),and the authors of the mediaeval works on medicine (Platearius - Pract.de egritud.matricis,cap. iii.,in Practica Serapionis,Lugd.,1525,fol.22; and De aegritud.curat.tract.ex schola Salernitana,in de Renzi,Collect.Salernit.,ii.,338; Valescus de Tharanta - Philonium,lib.vi.,cap,xiii.,Lugd.,1490,fol.282; Gordon - Lilium med.,Particula vii.,cap.x.,Lugd.,1574, 621; Savonarola - Practica,tract.vi.,cap.xxi.,Venet., 1497,fol.248b),in their very full descriptions of hysteria under the name "suffocatio matricis".The great length at which the disease is discussed by the ancient and mediaeval writers leaves us in no

doubt as to its general prevalence in those periods. In like manner for the practitioners of the sixteenth and seventeenth centuries, hysteria was a favourite subject of dissertations and other professional works; in these we also find the same view of hysteria as in the writings of antiquity and the middle ages, such as in implied in the terms "spasmi matricis" or "suffocatio" or "strangulatio" or praefocatio" and "passio hysterica". Ch. Lepois (Selectior. observ. et consillior. de praetervisis hactenus morbis, lib. singularis, sedt. ii., Pars. ii., cap. vii., Lugd. Batav., 1714, 115-182), at the beginning of the seventeeth century recognised distinctly that hysteria could occur as well in men as in women - an opinion which was supported, sixty or more years later, by Sydenham, who well understood the relations between hysteria and hypochondria, and who very aptly described a number of the symptoms of hysteria. It is to mead especially that the honour belongs of having recognised that hysteria is not a disease of any organ, but is a morbid condition of the entire organism. But the idea of a uterine localisation was not completely eradicated, for it crops up again, at the beginning of last century, in the writings of Louyer Villermay. Georget returned to the doctrine of Ch. Lepois and Sydenham, and understood well the chief differential characteristics of hysteria and epilepsy. Hufeland admitted that hysteria and hypochondria were separated from each other only by sexual differences, but in the same year - 1838 - dubois, of Amiens, again advanced the theory that hysteria was an affection peculiar to women, and he inclined to the belief that its seat was the uterus, an opinion which Landouzy also maintained. Brodie, following Georget and Brachet, returned to the nervous theory, and recognised the rôle of the brain and of moral impressions. Briquet returned also to the theories of Lepois, Sydenham, and Georget, and held that the seat of hysteria is in the brain, and that it ought to be regarded as a dynamic affection. Before this, Lepois and Sydenham had remarked that epilepsy may assume an hysterical character during its paroxysm. Sennert had described a uterine epilepsy. There were described later - by Pomme, Louyer Villermay - an hysterical epilepsy, and an epileptic hysteria, and, finally, a sort of hybrid, hystero-epilepsy, the attacks of which at the time resembled hysteria and epilepsy. Charcot has endeavoured to show that hystero-epilepsy with independent crises should be regarded as a coincidence of the two diseases in the same individual, while hystero-epilepsy with mixed crises is a pure hysteria, and has nothing to do with epilepsy. In the same individual we may see epileptiform attacks, or vice versa, or even so-called mixed crises in which the two neuroses are found together.

It will be evident from what has already been said that the geographical distribution of hysteria is, and has from remote ages been, very extensive. Reports from various parts of the world show that the principal seats of the malady are comprised in the group of countries in the Arctic latitudes of the

Eastern Hemisphere, including Iceland (Holland - Edin. Med.and Surg.Jour., April, 1812, 205), the Faröe Islands (Martius - Rev.méd., Feb., 1844; Panum - Bibl.for Laeger, 1847, i., 279), Lapland (Hogquér - Reise durch Lappland, Berl., 1841, 114; Castrén - Reisen im Norden, Leipzig, 1853, 151), and the parts of European and Asiatic Russia in the extreme north. The disease appears to be endemically prevalent amongst the women of the Samojeds, in the government of Archangel (Schrenck - Reisse durch die Tundren der Samojed, Dorpat, 1848, i., 70), and of the Jakutes, and other Siberian tribes, as well as among the inhabitants of Kamschatka (Gebler - Annal.der Heilkst. f.das Jahr., 1813, 330; Erman - Reise um die Erde u.s.w., Berlin, 1848, iii., 190). The Russian prevalence extends also to the more southern latitudes; thus, hysteria appears to be unusually common among the women of the Baltic provinces (Baer - Diss.de morbis inter Esthonos endemicis, Dorpat, 1814; Moritz - Spec.topogr.med.Dorpatensis, Dorpat, 1823), and among those of Viatka (Jonin - Med.Ztg.Russl., 1849, No.45), Simbrisk, Samara (Ucke - Das Klima und die Krankh.der Stadt Samara, Berlin, 1863, 221), and the Kirghiz Steppes (Maydell - Nonnulla topogr. med.Orenburg.spectantia, Dorpat, 1849). In the countries of Central Europe hysteria, it is well known, counts among the commoner maladies; but it a good deal more frequent in the southern parts of the Continent, such as the south of Spain and Italy. Of the latter Frank (Faure - Souvenirs du Midi) wrote: Quamvis spasmi (scil.hysterici) nec in regionibus septentrionibus desiderentur, eos tamen longe frequentibus in Italia obvenire, meae docent observationes"; and numerous cases have been reported from Venice (Prax.med.univ.preacepta, part.ii., vol.i., sect.ii., Lips., 1821, 558, note 11), Rome and Civita Vecchia (Bérard - Jour.des connais méd.-chir., Nov., 1847, 200; Jacquot - Gaz.méd.de Paris, 1853, No.34), Reggio (Manemi - Filiatre Sebezio, Nov., 1842), and other places; from likewise Turkey (Rigler - Die Türkei, etc., ii., 342), where, as Oppenheim (Uber den Zustand der Heilk.und der Volkskr.in der Türkei, Hamb., 1833, 64) says, it is "the heritage of women and the scourge of men"; also from the Ionian Islands, Hennen's, regarding Ithaca (Sketches of the Med.Topogr.of the Mediterranean, etc., London, 1830, 413), remarking: " A very common complaint among these people is hysterics, which appear in an infinite variety of shapes, often producing such extravagant gestures, as to make the ignorant believe the patient possessed of the devil. In these cases, the priest is called to frighten the demons, and to send them to their lurking places". So far as Asia is concerned, there have been only a few notices of the disease. According to West (Med.Rec., March, 1869, 28), it is seldom seen amongst the vigorous peoples of the interior of Asia Minor; on the other hand, Tobler (Beitr. zur med.Topogr.von Jerusalem, Berlin, 1855, 41) says that it is unusually common among the female population of Jerusalem. Among the European women resident in India, according to Macpherson (Indian Annals of Med.Sci., Jan., 1862, 236), Day (Madras Quart.Jour.of Med.Sci., Jan., 1862, 34), Auboeuf (Contributions to the Study of the Hygiene and the Diseases of India, Paris, 1882, 60), and

others,it is as common as in Central Europe;but they assert,- and Twining (Clinical Illustr.of the more Important Diseases of Bengal,Calcutta,1835,ii.,437) agrees with them,- that it is absolutely rare among the Hindu women.The same may be said to be true of the Anamese women,for Beaufils (Arch.de Méd.Nav.,April, 1882,259) did not see a single case of hysteria among them during a residence of several years in Cochin China.It is not infrequently seen in Tahiti and other islands of Polynesia (Wilson - Edin.Med.and Surg. Jour.,July,1806,287);is almost unknown among the natives of New Zealand(Thomson - Brit.and For.Med.-Chir.Rev.,Oct.,1854);and is no less rare in Australia. The contrary,however,holds in the African Continent, for we find references to its unusually common occurrence among thr native population of Mauritius (Chapotin - Topogr.méd.de l'Ile-de-France,Paris,1812,101), and among Hottentot women at the Cape of Good Hope; according to Roser,who practised in Gnadenthal,there are but few Hottentot women living there who do not suffer from hysteria in one form or another (Quoted by Scherzer - Zeitschr.der Wien.Aerzte,1858,165).The same is true of the women of Madagascar; Courbon (Observ.topogr.et méd.,etc.,Paris,1861,38) speaks of its great frequency in the Abyssinian territory bordering on the Red Sea; Pruner (Krankh.des Orients, 280),Vauvray (Arch.de Méd.Nav.,Sept.,1873),and Pissas (Congrès de méd.Grecs,etc.,Constantinople,1883,31) give the same account of it in Egypt,just as Ferrini (Saggio sul clima di Tunisi,Milano,1860,179) and Rabatel (Lyon méd.,1874,xvi.,312) do for Tunis.In Senegambia it is sometimes encountered (Chassaniol - Arch.de Med.Nav.,May,1865,508; Rey - Ibid.,June,1877; Borius - Ibid.,May,1882,370);and the same may be said for the Western Soudan (Ballay - L'Ogooué:L'Afrique équator.occidentale,Paris,1880,41).The disease appears to be common enough in certain parts of the Western Hemisphere;there is an account by Gras (Quelques mots sur Miquelon,Montp.,1867,34) of its exceptional frequency in Miquelon,in Newfoundland.It is very prevalent among women of the upper classes in the United States of America,particularly in the Southern States.On the tableland of Mexico,hysteria counts among the commonest of diseases,and it is frequent in Costa Rica, among the Creole women of the West Indies (Savaresy - De la Fièvre jaune,Napol.,1809,88),in Brazil,in all parts of the River Plate States (Santa Fé,Entre Rios, Corrientes,Salta),and in Chili (Gillis - U.S.Naval Astron.Expedition,abst.in Deutsch Klin.,1856,No. 24; Piderit - Ibid.,1853,No.48),and Peru(Tschudi - Oest. med.Woch.,1846,475; Smith - Edin.Med.and Surg.Jour., Oct.,1841,p.393).

E T I O L O G Y

PREDISPOSING CAUSES.

HEREDITY.

This is looked upon as one of the most important predisposing causes of hysteria. Hereditary liability may be direct or dissimilar. With especial frequency does an inheritance of like tendencies (gleichartige Vererebung - Hérédité simulaire of Morel) exist here, so that the hysteria of parents or forbears generally has as a consequence hysteria of the offspring. Particulary does the transmission of the disease from mother to daughter occur with great frequency. But, moreover, the various other nervous disorders, which have appeared in the ancestors, favour a disposition to hysteria in the descendants, just as it happens, on the other h hand, that hysteria appears in one generation, and epilepsy, chorea, insanity in the next. These relations may, from direct evidence, be recognised in numerous individual cases. The study of the mental disturbances, in particular, has furnished a mass of such facts. But they are scarcely yet to be expressed in definite figures, as too great difficulties underlie the exact arrangement of all the peculiarities of a sufficiently large number of individual cases. The statements of Briquet will here bear reproduction, owing to the importance of the matter. This observer obtained particulars concerning the parents, brothers and sisters of 351 hysterical persons, and found of these (in all numbering 1,103) 214 suffered from hysteria, and 58 from diseases of the nervous system. Thus, in all, nervous diseases were found to exist in about 25 per cent. of the nearest relatives. 167 non-hysterical persons whose family history was in like manner examined, had among 704 of their nearest relatives (parents, brothers, and sisters) only 11 who suffered from hysteria, and 4 from other diseases of the nervous system, i.e., rather more than 2 per cent. Briquet found, as regards the different influence of fathers and mothers, that of 282 fathers of hysterical patients of whom he could obtain accounts 6 had suffered from hysteria and 20 from other nervous diseases, while of 317 mothers there were 103 cases of hysteria and 6 of other diseases of the nervous system. Further, there were many more who suffered from hysteria and other nervous diseases among the sisters than among the brothers of the hysterical subjects. Briquet, moreover, proved the following with respect to the female descendants of the hysterical: Of hysterical women who bear daughters, rather more than the half transmit the disease to one or several of these, and, again, rather more than a half of the daughters of the latter, i.e., granddaughters, also become hysterical. In all, then,

hysteria affects rather more than a fourth part of the female descendants of the hysterical. Amann, in 208 cases of hysteria, says he has proved with certainty an hereditary tendency in 76 per cent., i.e., in 165 cases. This is doubtless an exaggeration.

AGE.

Hysteria belongs to all ages. Its occurrence, however, at certain periods of life with great frequency is well known. In childhood, long before puberty, well-marked hysterical phenomena occur. Briquet states that in so much as one-fifth of all cases the development of the diseases takes place before the twelfth year. Although the correctness of this statement has been much doubted, it appears to me from my own observation to approach tolerably near the truth. On the other hand the development of hysteria at an advanced age, after the close of the climacteric period is rare. Of the 268 cases observed by Amann, 16 occurred at an age between eight and fifteen years; 62 between sixteen and twenty-five; 92 between twenty-five and thirty-five; 81 between thirty-five and forty-five; 12 between forty-five and fifty-five; and 5 between fifty-five and seventy. The following table shows at a glance the observations in the matter made by five well-known authors:

Age.	Landouzy.	Georget.	Beau.	Briquet.	Scanzoni.	Total.
0-10	4	1	....	66	.....	71
10-15	48	5	6	98	4	161
15-20	105	7	7	140	13	272
20-25	80	4	3	71	64	289
25-30	40	3	.....	24		
30-35	38	...	....	9	78	149
35-40	15	...	...	9		
40-45	7	1	...	1	44	65
45-50	8	...	1	3		
50-55	4	...	...	3	11	25
55-60	4	...	1	2		
60-80	2	...	...	...	3	5
	355	21	18	426	217	1037

Briquet considers the period of puberty as by far the most favourable time of life for the development of hysteria, and in support of this advances the fact that of his 426 cases, 211 - more than half - developed themselves between the twelfth and twentieth years of life. The figures also of Landouzy agree with this, while, on the other hand, according to the statistics of Scanzoni and Amann, the disease occurred most frequently in the third and fourth decades. One must, however, remember that both the latter statistics are the result of gynaecological practice, and that an unusually large number, at all events, of the cases of hysteria occurred in connection with disease of the genital organs; and, further, that these latter forms develop themselves most frequently during that period in which the genital function is most active, and thus one may regard the results attained as less generally applicable, and

rather as deciding in favour of Briquet.Testimony is, however,agreed upon this point,that in the fifth decade the development of hysteria is much rarer than in both the preceding decades,and that a much more marked diminution takes place in the succeeding period. From the published statistics no support is given to the view that the climacteric period is favourable to the development of hysteria - a view which receives probability from the fact that the various psychical disturbances nearly related to hysteria develop themselves with comparative frequency at this time.Hysteria, then is a disease of early adult life,the greatest number of cases occurring between the ages of fifteen and twenty-five.In women the disease begins at an earlier age than in men.Children may be the subjects of hysteria,but,as a rule,it occurs after the age of seven years,the greatest number being between the age of eleven and fourteen.Clopatt (Quoted by Lloyd - Nervous Diseases,p.96) gives the statistics of 272 cases under the age of sixteen years;only 9 of these were under six years.It has only been in comparatively recent years that hysteria has been recognised in children, and cases have been reported in children as young as three years.Even the gravest forms of the disease may occur in childhood.Briquet states that 27 per cent.of his cases occurred in children,recording 87 cases,all girls,between five and twelve years of age;Amann collected 16 from eight to fifteen years in a total of 68; Althaus,71 below ten years out of 800; Landouzy,48 from ten to fifteen years out of 351;and Scanzoni,out of 217 cases,4 below ten years,and 13 between ten and fifteen years of age.Gilette (New York Med.Jour.and Obstet. Rev.,1882,vol.xxvi.,p.66) has reported a case of hysterical paralysis in a girl only eighteen months old. Hysterical hyperaesthesia,neuralgia,aphasia,aphonia, and other phenomena have been recorded almost in infancy.Abortive or incomplete hysteria is more common in boys and girls before puberty than is the fully developed disease,by which is meant the affection showing various grave correlated phenomena,such as severe spasm,hemianaesthesia,amblyopia,and paresis. The neurosis in young children is more restricted,in accordance with their smaller capacity,education,and experience.Special articles in the literature devoted to hysteria in childhood are not numerous,although much attention has been paid to the subject by neurologists and alienists.Georget (De l'Hypochondrie et de l'Hystérie,1824) recorded observations in 1824,and cases were reported by Landouzy (Traité complet de l'Hystérie,1846) in 1846,and by Briquet (Traité clinique et thérapeutique de l'Hystérie,1859),whose great work on hysteria appeared in 1859.Continental literature has contained in the past many articles on hysteria in children - though small in number compared to the immense literature on the general subject.Among German writers the subject has been discussed by Henoch (Wien Med.Presse,1881,xxii.,916-918),Smidt (Jahr.f.Kinderh., 1880,Bd.xv.,H.1),Mendel (Deut.med.Woch.,April 17,1884, No.16),Riegel (Zeit.f.klin.Med.,1884),Herz (Wien med.

Woch.,Nov.14,1885,No.46),Riesenfeld (Ueber Hysterie bei Kindern.,Diss.,Kiel,1887),Pukler (Wien.med.Woch., 1888,xxxviii.,431-433),Engelsburg (Ibid.,1888,xxxviii., 459-461),Hirschfeld (Internat.klin.Rundschau,Sept.23, 1888),and several others since then.Cases have been reported by such Italian observers as D'Abundo (La Riforma Medica,Rome,June 4,1888,No.128).Bourneville and D'Olier (Le Progres Médical,1880) in 1880 reported the case of a young boy stricken with hystero-epilepsy, offering all the phenomena manifested by a woman or a young girl;and,as early as 1882,Charcot (Le Prog.Méd., 1882,x.,985,1003) published a lecture on hysteria in young boys;Bourneville and Bonnaire (Le Prog.Méd., 1882,x.,645-648) also have reported interesting observations on hystero-epilepsy in a young boy,the case having been cured by gymnastics and internal treatment. Casaubon (Thèse de Paris,1884) in 1884 wrote his dissertation on hysteria in young boys,there were some most interesting facts on the subject reported,in 1885,by Peuzniez (Thèse de Paris,1885).

SEX.

Hysteria,as is well known,occurs much more frequently in females than in males;nevertheless,it must be remembered that the affection is by no means one peculiar to the former sex.In fact,all the characteristic appearances of hysteria may occasionally observed in men - the psychical condition,as well as the sensory and motor disturbances.Still,it is difficult to supply exact information regarding the relative frequency of this occurrence,as there exists,in general, a tendency to restrict as much the diagnosis of hysteria in men as it is usual to extend it in women;and,as a consequence of this tendency,hysteria is very often designated hypochondriasis in men and hypochondriasis hysteria in women.The significance of a general approximation to the actual state of affairs can only,therefore,be ascribed to the statistics which have been drawn up regarding the different sexual tendency to the disease.For instance, Briquet states that,of 1,000 cases of hysteria which he in part observed himself, and in part collected from the writings of others,50 occurred in men.So also he found the ratio among the predecessors of the hysterical persons he observed, viz.,204 hysterical women to 11 hysterical men.Thus, a tendency to the disease twenty times greater in the female than in the male would have to be assumed. It is probable that the proportion of hysterical men to hysterical women is greater than this.Since the appearance of Briquet's celebrated work,the occurrence of hysteria in the male has been much discussed.In one of his lectures Charcot (Le Progr.Méd.,1895) dwelt upon the subject,and remarked that during the preceding decade (1875-1885) no less than five doctoral theses had been written upon hysteria in the male. Batault has collected 218 cases,and Klein 80 cases. In Germany it is said that the proportion of hysteria in men to women is 1 to 10.In France, Marie found that the graver form of hysteria was relatively more

frequent in men than in women.This observation,however, applies to the lower classes,among whom hysteria in the male is more prevalent than in the higher classes.. In relative proportion the cases in males and females vary also according to the age.When it occurs in men hysteria may take on almost any form that it shows in women.It mau occur in the strong,although more likely to be seen among the weak and effeminate.Even strong, vigorous workmen are susceptible,at times,to hysteria. According to Charcot,the duration of the affection differs somewhat in the two sexes.In male patients it lasts a long time,and the symptoms are troublesome; in females the contrary is usually,although not always, the case.Some of the many forms of hysteria in the male of which there are clinical records are hysterical syncope,contracture,hysterical breathing,hysterical hydrophobia,coccygodynia,hemiparesis,hemianaesthesia,and blindness.A remarkable case of hysterical locomotor ataxia was,some yearsback,reported from Philadelphia. Wilks records several interesting cases of hysteria in boys.One simulated laryngismus stridulus,with paroxysmal syncopal attacks and barking.Another case was of hysterical maniacal excitement;another was an example of malleation,or constant movement as in hammering; still others were instances of extreme hyperaesthesia, of anorexia,and of nervous dyspnoea.The same author also dwellson the hysterical moral perversion found in boys as in girls;and cites some instances,e.g.,attempts to poison,murder,or attempts to murder,confessions false and true.Concerning the unequal tendency of the malady in the two sexes we can only at present conjecture.In each case we must distinguish two modes of its production,viz.; there may be,in the first place,congenital peculiarities,which render the nervous system of the female especially liable to a development of the disease;and,secondly,the blame may be imputed to acquired conditions,partly due to the social position of women,and partly to their peculiar physical function. So far as the first point is concerned,a congenital difference of predisposition in the two sexes flows immediately from the fact that even in childhood hysteria affects girls much more frequently than boys. Here,at all events,there can be as yet no question of a difference of physical function.The significance of the latter,however,shows itself undoubtedly in more advanced life,when we see how frequently diseased and excited conditions of the female genital organs occasion hysteria,and how,at an age when the function of those organs ceases,the tendency to the disease diminishes.

PSYCHICAL INFLUENCES(CONSTITUTION).

Certain peculiarities of the psychical constitution appear to favour the development of hysteria.Ribot (Diseases of the Will),chiefly after Huchard (Axenfeld and Huchard - Treatise on Neuroses,Paris,1883,pp.958-971),the hysterical constitution.It is a state in which volition is nearly always lacking.The prominent trait is mobility.The hysterical pass with incredible rapidity from joy to sadness,from laughter to tears;they are

changeable,freakish,or capricious;they ahev fits of sobbing,or putbursts of laughter.Ch.Richet compares tham to children,who oftentimes can be made to laugh heartily while their cheeks are still wet with tears. They are in a condition of moral ataxy,lacking equilibrium between the higher and lower faculties.Sydenham says of them that inconstancy is their most common trait:their sensibilities are aroused by the most trivial cause,while profounder emotions scarcely touch them.

RACE AND CLIMATE.

In our own country hysteria assumes almost every form,for the reason,perhaps,that we have amongst us, at least in the large towns and cities,persons of every race and nationality,either pure or mixed.While it cannot be clearly shown that certain races are much more prone to hysteria than others,the type of the disease is doubtless much influenced by racial and climatic conditions.Certain phases of the malady prevail in certain sections more than in others.We may ascribe the more or less frequent occurrence of hysteria in various parts of the world chiefly to such influences as serve to give a certain direction to the natural development of the mental and bodily powers, particularly those of women.Again,the degree of immunity from hysteria enjoyed by certain races and nationalities,- referred to here and in the foregoing geographical outline,- would have to be explained,not by their physiological constitutional peculiarities,but,in the first instance,by their whole manner of life.Mutatis mutandis,we may apply to all families of mankind what Rigler says of the negro race:"The reason why negresses suffer less from hysteria than white women is not anything more favourable a priori in their organisation; it is rather that their inferior position makes labour and active exercise incumbent upon them and so makes them hardy.If they led the same soft life as other city dames,their nerves would play them the same tricks as in women of a white skin".In the coloured population of the American city hospitals and asylums hysterical convulsions,particularly of the purposive kind,and hysterical mania,are often seen.The disease not rarely occurs in the negro,and is then more likely to be of the demonstrative or convulsive than of a paralytic or negative form.Hysteria is found in every climate, but in warm countries the disorder seems more likely to be mobile and dramatic than when found in the more temperate or colder regions.In short,the influence which climate exerts,like that of race,is rather on the type of hysteria than on the disease itself.

The development of hysteria appears to be influenced in some way by season and meteorological conditions. In the young,especially,hysterical attacks may be occasioned by either an enervating climate or one of great variations.Many observations have been made by Mitchell (Lectures on Nervous Diseases,etc.),Lewis (Polyclinic, Jan.,1887,vol.iv.,p.205),and others on the effects of climate and seasons on chorea,and the facts obtained

have about the same significance for hysteria; in fact the chorea of children is not seldom hysterical in nature. It appears to be in the spring, and particularly after a severe winter, that hysterical chorea and hysteria of other forms are more likely to develop.

EDUCATION.

That education has a good deal to do with the development of hysteria is generally allowed. By means of appropriate physical and moral training, the predisposition to disease may be extinguished, just as, conversely, the tendency, existing only in a slight degree, or not at all, may be artificially aroused. All influences which favour physical debility are active in the latter direction; that is, both a too delicate nurture, by which a necessary degree of robustness fails to be imparted to the body, and a too severe rearing, which exacts physical efforts beyond the power to perform them. Both extremes are also pernicious in a moral sense. By too great indulgence, pusillanimity and peevishness are fostered, which prepare the way for hysterical phenomena; by undue rigour and intimidation, such violent disturbance of the feelings may be called forth, that exalted irritability of the entire nervous system, coupled with indecision of character, is the result, calculated to favour the disease. An unsettled, crotchety education, however, now exceeding in one direction and again in another, is fraught with the greatest danger. In schools, and particularly in girls' boarding-schools, the foundation of hysteria is likewise often laid. Especially dangerous are too great demands upon the mental capacity, overburdening with lessons, and at the same time stimulating an over-driven ambition. A fruitful source of the evil in this direction is the process of cramming which are resorted to in order to force children from the lower to the higher grades of our public schools, and more especially from such to institutions of the higher-grade order. It is not always so much hard study as it is the badly-arranged and too numerous subjects of study that make the strain. School-children are too largely in the hands of those educationalists to whom Clouston refers (Clinical Lectures on Mental Diseases), who go on the theory that there is an unlimited capacity in every individual brain for education to any extent, and in any direction. Children, varying in age and original capacity, in previous preparation, and in home-surroundings, are forced into the same moulds and grooves. The slow must keep place with the fleet, the frail with the sturdy, the children of toil and deprivation with the sons and daughters of wealth and luxury. A child is always liable to suffer from mental overwork when the effort is made to force its education beyond its receptive powers. Education is not individualized enough. The mind of the child is often confused with a multitude of ill-assorted studies. Recreation is neglected, and unhealthy emulation is too much cultivated. In many communities admissions to various grades of public schools are regulated entirely by the averages obtained at examinations, instead of

on the general record of the pupils in connection with proper,but not too severe,examinations.In consequence often,after the campaign of overwork and confusion called an examination,we see children developing serious disturbances of health,and even organic disease, e.g., hysteria,hystero-epilepsy,loss of appetite, paroxysmal fever,headache or neckache,disturbed sleep, temporary albuminuria,and chorea.

IMITATION.

In the development of the disease the influence of a faulty education cannot be fully estimated if we do not take into account a co-operating circumstance, which we find even at a more mature age as a casual element of hysteria,viz.,the rise of an imitative impulse.Hysterical mothers transmit not only the seeds of the disease to their children;they also favour its development by educatin and their own example.Above all, it is those symptoms which occur in paroxysms,especially convulsions,which provoke imitation.But the whole mode offeeling and thought also transforms itself from continued intercourse.As in children,so also sometimes in nurses who have for a length of time attended hysterical patients,this so-called imitative infection is operative;or in other patients who have been nursed beside; and,above all,in people who have been the witnesses of an hysterical attack.The convulsive attacks of former ages,and the less extensive attacks of the same nature which occur in hospitals,cloisters,factories,girls' schools,etc., at the present day,show how an actual epidemic of hysteria may take place in this way.Furthermore,it is the usual thing to find that this sort of infection operates only in such persons as are already otherwise disposed to hysteria,and the epidemic spread of the disease is usually ushered in by general predisosing influences, Thus,as a rule,want and misery,in consequence of war or the ravages of disease,or owing to the failure of crops,and famine,have cleared the way for those convulsive epidemics which have appeared and spread through whole districts and populations,usually connected with great political and religious disturbances.In the limited epidemics of hospitals,debility resulting from other diseases,as well as the enforced inactivity,are to be taken into account as co-operative factors.In educational institutions it is the defects already mentioned in the physical and psychical régime which may induce the tendency in a large number of individuals at the same time.Medical students are said to suffer from various neuromimetic disorders at times during their attendance upon lectures:to such the term "students' hysteria"has been applied.P.Horrocks (Med. and Surg.Reporter,vol.xxxvii.,Nov.24,1877),in a prize essay presented to the Physical Society of Guy's Hospital,said that during the fortnight following the death of Napoleon,Sir James Paget was consulted for stone in the bladder by no less than four gentlemen who had nothing the matter with them."How many students",says Horrocks,"are there,of one year's standing or more,who have not imagined and really become convinced that they were suffering from some disease,generally a fatal

disease.I can also well remember how one of my academic friends,a tall neurotic medical student,complained bitterly to me one day that he was suffering from Bright's disease,and that itwould be necessary to relinguish his,so far,brilliant career in consequence. The same person is,however,still living and quite healthy.His supposed malady was doubtless suggested to him by some lectures given atthe time on renal affections.

SOCIAL POSITION AND OCCUPATION.

Hysteria is a disease peculiar to no special position in life,for it is to be seen among the working classes as well as among the affluent.While this is true,however,hysteria of certain types is met with more frequently in certain social positions.Some of the remarks about race and climate apply here.It is the type of the disorder,and its relative frequency amongst certain classes,which are affected bu social position. Young women of the richer classes,who have been spoilt and pampered,whose wants and whose whims have been served without stint or opposition,often pass into hysterical conditions which do not have any special determining causative factor,or at least only such as are comparatively trivial.Occasionally,in them hystero-epilepsy,catalepsy,and the train of grave hysterical phenomena areobserved.We are more likely,however,to have the minor and indefinite hysterical symptoms;or, if grave manifestations be present,they are most usually ataxia,paralysis,contractures,or aphonia,and not convulsive phenomena.In our large towns and cities hysteria is especially prevalent among certain classes of working-people,as among the operatives in factories. Dividing society into the three classes of rich,middle, and poor,hysteria - though by no means absent in the middle class,is most prevalent in the first and last. The occurrence of hysteria is predisposed to by the absence of work on the one hand,and,on the other,the necessity of following an occupation for which the individual is unfitted,particularly irritating lines of work.It may be caused,therefore,either by no occupation, overwork,or irritating employment.As to the special conditions,hysteria would seem to result most commonly in those positions where physical fatigue combines with undue mental irritation to harass and reduce the nervous system.In men it occurs often as the result of overwork conjoined with financial embarrassment.It is met with not infrequently among teachers,particularly in those who are engaged in the straining and overstraining labour of preparing children for examinations.A good method of education is the best preventive;a bad method is one of the most fruitful causes of this affection. In our large cities,in which all houses are so poorly supplied with grounds,yards,or courts,for out-door exercise,the childre even of the well-to-do develop hysteria in the winter and early spring because of undueconfinement within-doors.In-door games and amusements failing or cloying,they indulge too much in reading and in effeminate plays.The life of a child should be made as natural,helathful,and happy as possible,in order to provide against nervous break-down;and this can be accomplished only by a proper admixture of in-door and out-door life,which is too often practically

impossible in the winter in cities.Under such circumstances children should be sent to the seaside or into the country in the summer.

DYSCRASIAE.

Certain morbis conditions of the system,or dyscrasiae,are known to be capable of producing a predisposition to hysteria,and this appears to be especially true as regards the tubercular diathesis,between which two maladies Grasset (The Relation of Hysteria with the Scrofulous and the Tubercular Diathesis,Brain,April and July,1884) says there is a distinct connection.When the relations of hysteria to the tubercular diathesis are spoken of by him,it is not meant that hysterical subjects have tubercles in the lungs,but that these diatheses are found in various generations,and that among some subjects of the hereditary series the constitutioaal states manifest themselves as hysteria.It is not the evidence of hysteria with pulmonary and other tuberculous conditions that he is considering,but that hysteria may be,and often is,a manifestation of the tubercular diathesis.Two cases may present themselves:in one the neurosis is the only manifestation of the diathesis;in the other,it is continued in the same subject along with the other diathetic manifestations.In the demonstration of this theory he concludes with a series of most interesting cases,which he arranges into two groups.In the first,hysteria is the only manifestation of the tubercular diathesis;in the second,are simultaneous pulmonary and hysterical manifestations.In the first group he has arranged eight personal observations and seventeen derived from various observers;and two personal and seventeen compiled observations in the second.Closely connected with the tubercular diathesis are,not only hysteria,but other neuroses and psychoses.One's everyday experience and observation go far to confirm the views of Grasset;although I recognize fully the strength of the objection of Brachat,Dubois,and others that, phthsis being such a common complaint,it might be demonstrated by statistics that it was related to almost any disease.The association of nervous disorders with phthisis is well known: the latter is of frequent occurrence among the insane and idiotic,as well as among epileptics. The insane of our asylums die of pulmonary troubles oftener almost than of any other disease.The position taken is not invalidated by the fact that hysteria is met with in the robust and vigorous,for the robust and vigorous who are not hysterical are not infrequently to be found in those whose ancestors have some form of tuberculous disease.Gairdner (Quoted by Handfield Jones - Studies on Functional Nervous Disorders) supports Laycock's theory that the gouty diathesis is particularly liable to give rise to the hysterical paroxysm,or to irregular forms of hysteria.In this country at least, gout appears to play a great part in the production of nervous and other disorders;and among the most striking examples of hysteria that come under one's observation many of them are in gouty families,the disease being sometimes of the regular type,but oftener of anomalous forms.In a few of them remedies directed to the relief of the gouty dyscrasia,in connection with other measures,

have been efficient;but more frequently they fail,for while a relation may exist between the neurotic disorder and the diathesis,it is the former and not the latter that we ought to treat.In children,and particularly in girls,anaemia and chlorosis may have a good deal to do with the occurrence of an hysterical attack.

HYGIENIC DEFECTS.

The development of hysteria is certainly predisposed to by improper hygienic surroundings,tending as they do to enervation and physical depression;and this is especially true as regards habitations and particular rooms in houses assigned to the children of a neurotic tendency.The children of the poor are compelled to live as best they can,but the rich and middle classes,and even the poor,can improve the chances for nervous and general health by attention to the opportunities within their reach.If children are compelled to be a large part of their time within-doors,whenever possible the most healthful rooms should be set aside for their use.Just as the sick,particularly of certain classes,get better in sunny rooms,so those in health, particularly children,in pleasant living-rooms will regain their health and powers of resistance.Hence, rooms of good size and southern aspect should be given preference;for chilly,sunless,badly-ventilated rooms sap up the nervous vitality of all persons who may be so unfortunate as to have to live in them. Many years ago a writer upon hysteria (Brain,April and July,1884) very aptly remarked that it had always been to him a matter of surprise "to see the amount of trouble and pains bestowed on the proper housing and feeding of horses and dogs or other domestic animals,while at the same time comparatively little attention is paid to these matters with regard to the rearing of children. Model stables and kennels abound,while the model nursery is almost unknown". The same writer dwells upon the fact that though the health of a child is obviously more important than that of the animals named,-warming,ventilation,and aspect"are all subjects which are thoroughly considered in the stable,while as regards the nursery they are generally left for chance to decide.

EXCITING CAUSES.

MENTAL EXCITEMENT AND IMITATION.

In past ages some of the epidemics of hysteria that have arisen have assumed vast proportions,and the effect of imitation in their production is generally admitted.Furthermore,most of the epidemics and endemics of nervous disorders which have from time to time prevailed in various parts of the world have either been hysterical in character or have had in them a large element of hysteria.In ancient times,in the Middle Ages,and within comparatievely recent times, extraordinary epidemics have occurred.No country within the range of medical observation has been entirely free from them.Communities civilized and semi-civilized,Christian and Mohammedan,Protestant and Roman Catholic,have had a fair share of the visitations.

Some of them constitute epochs in history,and,as Hecker (The Epidemics of the Middle Ages,from the German of J.F.C.Hecker,M.D.,Professor at the Frederick William University at Berlin,etc.,translated by B.G. Babington,M.D.,F.R.S.,etc.;London,1859),their greatest historian,has remarked,their study affords a deep insight into the work of the human mind in certain states of society."They are",he says,"a portion of history,and they will never return in the way in which they are recorded;but they expose a vulnerable part of man - the instinct of imitation- and are therefore very nearly connected with human life in the aggregate".These epidemics have been discussed by some authors under hysteria,by others under catalepsy, by several under chorea,and by still others under ecstasy- a fact which serves to emphasize the truth that while these affections have points of difference, they have also an easily-traced bond of union.They are but variations of the same discordant tune.Briquet in an admirable manner sketches their history from the age of Pausanias and Plutarch to the time of Mesmer, and the subject has been enlarged by the writings of Jas.J.Levick (An Historical Sketch of the Dance of St.Vitus,with Notices of Some Kindred Disorders,Med. and Surg.Reporter,vol.vii.,Dec.21 and 28,1861,p.276; and Ibid.,Jan.4,and 11,1862,p.322).It appears certain that these so-called"epidemic psychopathies" were not, in the strict sense of the term,manifestations of mental disease,but of accesses of ecstasy resting essentially upon an hysterical basis.They were called forth by various causes,but most of all by religious enthusiasm;and they found a fruitful soil uponwhich to grow in the imitative instincts of the great multitudes which they moved.At the same time they have held out to imposture,and other low motives,a convenient handle by which to work their purpose;but it would be just as perverse to ascribe these psychical and physical manifestations absolutely and wholesale to imposture,as to ignore the existence of that factor altogether.It is beyond my purpose to give a history of these so-called psychopathic epidemics;but I shall limit myself to bringing forward a few of the most interesting observations of the kind.The reason why such should have assumed much larger proportions in former ages - dominated as they were by all kinds of superstition, by devils,demons,and witches - than in the modern period - illuminated as it is,if not everywhere penetrated, by the light of reason - is easy tounderstand.Such manifestations as the dancy frenzy and the children's crusades in mediaeval Germany,as well as in the tarantismi of Italy in the fifteenth-seventeenth centuries, were only possible at the time when not merely the masses,but even the more intelligent and better educated classes were profoundly steeped in a sort of mysticism which gave itself up to subjective impressions without tracing them to their source,and called in the aid of supernatural powers whenever a scanty acquaintance with the powers of nature failed to furnish an explanation;a time when also the clerical party did not scruple to stir up religious fanaticism and

bigotry for their own purpose,and to encourage them so long as they could keep them under their own control. To particularize: we are told that,in the year 1237, one hundred children or more were suddenly seized with the dancing mania at Erfurt,and that the same sort of thing occurred at Utrecht forty-one years afterwards. The so-called dancing mania appears to have affected large assemblies of men and women,at Aix-la-Chapelle, as early as the year 1374,who formed themselves into circles and danced for hours in wild delirium.Attacks of insensibility,of convulsions,and of ecstasy occurred. The disease spread from Germany to the Netherlands. In a few months it broke out in Cologne,and about the same time at Metz.This rich commercial city became one of ruinous disorder,as peasants left their ploughs, mechanics their workshops,housewives their domestic duties,to join the wild revelry.In these early days the festival of St.John the Baptist was celebrated in remarkable ways.Fanatical rites,often cruel and senseless,were performed on these occasions.Hecker supposes that the wild revels of St.John's Day in 1374 may have something to do with the outbreak of the frightful dancing mania soon after this celebration;at any rate,a malady which was long impending was brought to a crisis at that time.Another illustration of an early religio-nervous craze is afforded by the Flagellants.Flagellation was indulged in for generations before the fourteenth century,but it then became epidemic.A brotherhood of Flagellants was formed;they marched in processions carrying scourges,with which they violently lashed and scourged themselves.Even as late as 1843,on Good Friday,such processions were to be seen in Lisbon.In 1418 Strasburg was visited by the dancing plague.Those afflicted were conducted to the chapel of St.Vitus,where priests attempted to relieve them by religious ceremonies.The name St.Vitus's dance,still so common as a synonym for chorea,has come down to us because of the alleged wonderful doings of this saint in behalf of those affected during some of the dancing epidemics.Both Hecker and Madden (Phantasmata;or,Illusions and Fanaticisms,etc.,London, 1857) give interesting details of the personal history of St.Vitus,who was a Sicilian,born in the time of Diocletian,and even in childhood is said to have worked great miracles,and was delivered from many sufferings and torments.He died about the year 303. His body was removed to Apulia,afterwards to St. Denys,in France,and still later to the abbey of Corvey, in Saxony.A legend was invented that St.Vitus,just before he bent his neck to the sword,prayed to God that he(St.V.)might protectfrom the dancing mania all those who should fast upon the eve of his feast and also celebrate the latter whenenver it became due. The people were taught that a voice from heaven was then heard saying:"Vitus,thy prayer is accepted". This malady (Chorus Sancti Viti) was termed by Paracelsus the "lascivious dance",and says that persons striken with it were helpless until relieved by either recovery or death.The malady spread rapidly through France and Holland,and before the close of the century

was introduced into England.Burton,in his "Anatomy of Melancholy",refers to it,and speaks of the idiosyncrasies of the individuals afflicted.It is said they could not abide one in red clothes,and they loved music above all things,and also that the magistrates in Germany hired musicians to give them music,and provided them with sturdy companions to dance with.Their endurance was marvellous.Plater speaks of a woman in Basle whom he saw,that danced for a month.In Strasburg many of them ate nothing for days or nights until their mania subsided.Paracelsus,in the beginning of the sixteenth century,was the firstto make a study of this disease.He outlined the severest treatment for it,and boasted that he cured many of its victims.Some mention should also be made of another strange disorder called tarantismus,or tarantism,which derived its anme from the fact that it was supposed to be caused by the bite of the tarantula,a ground-spider common in Apulia, Italy.According to Hecker,the work tarantula is the same as terrantola,a name given by the Italians to a poisonous lizard of extraordinary endowments.The fear of the insect was so general that its bite was much ortener imagined than actually received.The disorder was probably in existence long before the fifteenth century,although the first account of it,that of Nicholas Perotts,refers to its occurrence in this century.Many symptoms followed the bite or supposed bite: the individuals became melancholy,stupified,lost their senses,and,above all,were irresistibly impelled to dance until almost exhausted or lifeless.It was believed that the results of the bite could be cured,or at least much benefited,by dancing to a certain kind of music;to this day dances,called tarantellas,are performed,with intricate figures to marked time, in certain parts of Italy.Tarantism was at its height in the seventeenth century.In the Tigre country,Abyssinia,this disease appeared under the name of tigretier, which,according to Hecker,resembled theoriginal mania of the St.John's dancers.It exhibited a similar ecstasy.Dancing to certain kinds of instruments was said to sure the afflicted.The dancing mania of the fifteenth century,according to Levick,is still kept in popular remembrance in some places by an annual festival, especially at Echternarch,a small town in Luxembourg, where a jumping procession,composed of many thousands of dancers,occurs every Whit Tuesday.The wild and grotesque phenomena of hysteria or hystero-epilepsy were to a large extent exhibited by the Anabaptists, one of the religious sects of the sixteenth century. Near the close of the seventeenth century,the French Calvinists,or Camisards,were also the subjects of ecstasy and of peculiar fits of trembling.They were sometimes violently thrown down,the trembleurs experiencing severe convulsive shocks in the head,the shoulders,the legs,or the arms.In the first half of the eighteenth century - about 1731 - great crowds frequented the tomb of Deacon François de Paris,an advocate of the doctrines of Janesius.It was reported that miracles were performed at his tomb:the sick were brought there,and were often seized with convulsions

and pains,through which they were healed.The subjects of these attacks are sometimes spoken of as the Jansenist Convulsionnaires.The tomb was in the cemetery of St.Médard,and hence those was visited the place were also termed the Convulsionnaires of St.Métard. Great immorality prevailed in the secret meetings of the believers.The disorder increased,multiplied,and disseminated,lasting,with more or less intensity,for fifty-nine years.Some remarkable instances of the effect of sympathy or imitation,exhibited on a smaller scale than in the epidemics of the Middle Ages,are given by Hecker.One is a series of cases of fits in a Lancashire factory,the first one brought on by a girl putting a mouse into the bosom of another.In the Charité Hospital in Berlin,in 1801,a patient fell into strong convulsions,and immediately afterward six other patients were affected in the same way;by degrees eight more were attacked.At Redruth a man cried out in a chapel:"What shall I do to be saved?"Others followed his example,and shortly afterward suffered most excruciatting pain in the body.The occurrence soon became public;hundreds came,and many of them were affected in the same way.The disorder included convulsions;in a short time it attacked four thousanr people,and spread from town to town.In the production of hysteria in children,as in adults,imitation,mimicry,or nervous contagion often plays an important rôle.In this way have originated many of the epidemics and endemics of various ages and countries,some of which particularly affected children,as the child pilgrimages and dancing mania of the Middle Ages,with their wanderings and sufferings,their revelations and ecstatic seizures. Hecker also dwells on these pilgrimages.The greatest appears to have been the boy crusade in the year 1212. The passion to repossess the Holy Land then had its grip on Roman Catholic Europe.The firstimpulse to the child pilgrimages was givn by a boy-shepherd,who had revelations and ecstatic seizures,and held himself to be an ambassador of the Lord.Some thirty thousand souls came to partake of his revelations;new child-prophets and miracle-workers arose;the children of the rich and poor flocked together from all quarters;parents were unable to restrain them,and some even began to urge them.A host of boys,armed and unarmed,assembled at Vendôme,and started for Jerusalem with a boy-prophet at their head.They got to Marseilles,and embarked on seven large ships.Two ships were wrecked,and not a soul was saved.The other five ships reached Bougia and Alexandria,and the young crusaders were all sold as slaves to the Saracens.In Germany the child-prophets arose,especially in the Rhine countries, and far eastward.An army of them gathered together, crossed the Alps,and reached Genoa.They were soon scattered;many perished;many were retained as servants in foreign lands;some reached Rome.A second child's pilgrimage occurred twenty-five years later.It was confined to the city of Erfurt.One thousand children wandered,dancing and leaping,to Armstadt,and were brought back in carts.In 1458,another child's pilgrimage occurred from Halle,in Suabia,to Mount St.Michael

in Normandy.In 1550,in the convent of Yvertet,in the territary of Liège,a leaping and jumping disorder seized one of the inmates,and spread to many of the others.The convulsive disorders of these early times, especially when they occurred in convents,were sometimes associated with strange delusions that the subjects of them were changed into lower animals. Various names have been given to disorders of this kind,such as lycanthropia,or wolf madness,zoomania,or animal madness,etc.In this country,in 1760, a religious sect known as the jumpers prevailed,and other jumping epidemics have also prevailed in Germany and elsewhere.The subjects were affected with religious frenzy,and jumped continuously for hours.The subject would be lacking in detail were some mention not to be nade of the New England witchcraft episode,which form of epidemic excitement prevailed during the latter part of the seventeenth century,adults and children being its subjects.The Rev.Cotton Mather records many cases,some of which illustrate almost every phase of hysteria.Individuals who were seized with attacks, which would now be regarded as hysterical or hystero-epileptic,were supposed to have become possessed through the machinations of others.Those who weresupposed to be possessed were tried,condemned,and executed in large numbers.Many accused themselves of converse with the devil.Before the good sense of the people came tothe rescue a large number of the populace were executed.Various parts of America have in the past been visited by religious nervous ecidemics.According to D.W.Yandell (Epidemic Convulsions,Brain,Oct.,1881, vol.iv.,p.339 et seq.),convulsions were first noticed in the revivals from 1735 to 1742.Many instances are recorded of fainting,falling,trance,numbness,outcries, and spasms.The epidemic of Kentucky spread widely, reappeared for years,and involved a district from Ohio to the mountains of Tenessee,and even to the old settlements in the Carolinas.Wonderful displays took place in the camp-meetings.At one of these,where twenty thousand people were present,sobs,shrieks,and shouts were heard;sudden spasms seized upon scores and dashed them to the ground.Preachers went around in ecstasy,singing,shouting,and shaking hands.Sometimes a little boy or girl would be seen passionately exhorting the multitude,reminding one of the part taken by the childfen in the epidemics of the Middle Ages.Some subjects were cataleptic;general convulsions appeared in others.A sense of pins and needles were complained of by many;others felt a numbness,and lost all control of their muscles.One form of convulsive disorder received the name of jerks.Sometimes the jerking affected a single member or part.The Rev.Richard McNemar has given a graphic description of this jerking exercise in a "Historu of the Kentucky Revival".The head would fly backward and forward,or from side to side; the subject was dashed to the ground,or would bounce from place to place like a football,or hop around with head,limbs,and trunk twitching and jolting in every direction.Curiously,few were hurt.Interesting descriptions of the jerks can be found in various American

autobiographical and historical religious works.It was quite a common thing to observe a peculiar form of hysterical laughter. The holy laugh began to be a part of religious worship.Dancing,barking,and otherwise acting dogslike,were still other manifestations.These terrible excitements are said never to have ended in permanentinsanity.Hammond and others have well described the absurd and extraordinary exhibitions witnessed among the Shakers,and relegate them to the same category.According to the Rev.William Gibson(History of the Revival in Ireland in 1859),the Irish,im 1859,were attacked by a sort of epidemic of ecstasy and by other hysterical phenomena similar to those described above. The sect calling themselves the Salvation Army,which has in recent years excited so much attention,curiosity, and comment,both in this country and abroad,is said to have much in common with the Jumpers,the Jerkers, and the Convulsionnaires.That the frenzied excitement at their meetings,with the tambourine-playing,dancing, shouting,and improvising are simply the same phases of religio-hysterical disorder,modified by differences in environment and age,is the opinion of many alienists. An epidemic which recalls the epidemics of the Middle Ages occurred,in 1878,in the district of Tolmezo,Italy. It has been described by M.Léon Colin(Annales d'Hyg., Oct.,1880).It was reported to the prefect of Undine that for three months some forty females living in the commune of Verzeguis had been attacked by religious mania."From the report it appears that the first was in the person of a woman named Marguerite Vidusson,who had been the subject of simple hysteria for about eight years.In January,1878,she began to suffer from convulsive attacks,accompanied by cries and lamentations.She was regarded as the subject of demoniacal possession,and on the first Sunday in May was publicly exorcised.Her affection,however,increased in gravity; the attacks were more frequent and intense,and were especially provoked by the sound of the church-bells and by the sight of clergymen.Seven months later three other hysterical girls became subject to convulsive and clamorous attacks.Here,again,an attempt was made to get rid of the supposed demon.A solemn Mass was said in the presence of the sufferers,but was followed only by a fresh outbreak.At the time of the visit of the delegates eighteen were suffering,aged from sixteen to twenty-six years,except three,whose ages were respectively forty-five,fifty-five,and sixty-three years. Similar symptoms had also appeared in a young soldier on leave in the village".During the attack the patients talked of the demon which possessed them,stating the date on which they were seized with it,and the names of the persons who were possessed before them.Some boasted of being prophetesses and clairvoyants,and of having the gift og tongues.In all,the sound of church-bells caused attacks,and religious ceremonies appeared not only to aggravate the disease in the sufferers, but also to cause its extension to others not previously attacked.Colin points out that the soil is particularly favourable for the development of an epidemic

of this nature,and the epidemic proved extremely obstinate and of long duration.The people of Verzeguis are backward in education,and most superstitious. Functional nervous disorders are common amongst them. The inhabitants of the village are largely cut off from intercourse with the adjoining country,in consequence of comparative inaccessibility,and the frequent interruption of communications by storms and floods. Craniometric observations on twelve of the inhabitants seemed to show the brachycephalic form of skull in predominance,and that the development of the cranium was slightly less than is usually the case in normal individuals.Since that time similar epidemics have been reported from Norway and New Caledonia.In 1880, an epidemic of hysteria,from imitation,occurred in Philadelphia. A brief account of them is given by Mitchell in his "Lectures".The outbreak occurred in a Church Home for Children,to which S.S.Stryker was physician.The Home contained ninety-five girls and six boys;all of them were well nourished and in good condition.The epidemic began by a girl having slight convulsive twitchings of the extremities,with a little numbness.Attacks returned daily;respiration became loud and crowing.She soon had all the phenomena of convulsive hysteria.Many of her comrades began to imitate her bark.Soon another girl of ten was attacked with harsh,gasping respiration,with crowing,speechlessness, clutching at her throat,and the whole series of the phenomena exhibited by the first girl attacked.Nine or ten others were affected in like manner,and many of the remaining children had similar symptoms in a slight degree.At first convulsions occurred irregularly;after a while they appeared every evening;later,both morning and evening.The presence of visitors would excite them. Many interesting hysterical phases occurred among the children.One night some of them took to walking about on their hands and knees;others described visions.The girls often spoke of being surrounded by wild beasts, and one child would adopt the fiction which another related in her hearing.The epidemic was over in two months,as the cases were distributed amongst different hospitals.A more recent outbreak,which attracted considerable popular attention,was in February,1889,in a school for soldiers' orphans at McAllisterville,Pennsylvania.The newspapers contained sensational accounts of this disorder,which they attributed to diverse causes.The patients,who were all boys,indulged in striking and kicking,running,and damaging furniture. One common manifestation was the calling of everything by a single name.One boy was attacked after another, and the effect of imitation was often distinctly traceable.It was supposed that many of the cases were instances of deliberate shamming or feigning,and some of the boys were persuaded into confessing that this was a fact;and doubtless in every endemic or epidemic of this kind some cases will be due to deliberate shamming,and others to involuntary imitation or neuromimicry.Disappearance of the malady was soon noticed.

This tendency to imitation or nervous mimicry has been illustrated by Roberts (Practitioner,Nov.,1879) in an interesting experience.A boy,thirteen years old,had an hysterical attack,which degenerated into a hoarse sound resembling the bleating of a goat,this continuing,with some variations as to time of day,for fifteen months,and then gradually subsiding.The boy was separated as much as possible from his brothers and sisters, but on one occasion passed some days with his elder brother,and four months afterwards this brother also had an attack of hysterical barking,which lasted a fortnight.He had a sister nine years old,who four years after her brother's recovery also began to bark and to show signs otherwise of hysteria.The mother had been hysterical in her youth,so that the tendency in the children was ingerited.It is important to note,as Roberts says of this family,how hysteria moulds its manifestations,by unconscious mimicry,or a contiguous model,in all cases the disorder affecting almost exclusively the diaphragm and larynx,and almost exactly in the same fashion."This is quite in harmony with the history of this great neurosis.When hysteria breaks out - epidemically,as it were - in a school or nunnery, all the cases develop the same type of manifestations as those exhibited by the individual first attacked". Mitchell (Lectures on Nervous Diseases,etc.) relates the case of a lad,eleven years of age,whose sister, nine years old,had an hysterical attack as the result of running a nail into her foot,which seemed to have impressed him with the idea that he was afflicted in the same manner.After this he frequently had spasms which were lacking in the diagnostic marks of epilepsy,and which were caused by the cold douche and the threat of the application of the hot iron.Another patient,after an attack of ague,began to limp and complain of pain in the right knee;hip-joint disease was diagnosed,and the child was taken to a surgical institute,where she grew worse and developed pain,hyperaesthesias,pseudo-palsies,and contractures,with occasional attacks of hysterical spasms.She recovered,however, under perfect rest,isolation,and a change of scene. In 1880,Beard (Journal of Nervous and Mental Diseases, vol.vii.,1880,p.487) described the Jumpers or Jumping Frenchmen of Maine and Northern New Hampshire.They presented nervous phenomena in some phases allied to hysteria.In June,1880,Beard visited Moosehead Lake and experimented with some of them.Whatever order was given them was at once obeyed.One of the Jumpers,who was sitting in a chair with a knife in his hand,was told to throw it,and he threw it quickly so that it stuck in a beam opposite;at the same time he repeated the order to throw it with a cry of alarm.They were tried with Latin and Greek quotations,and repeated or echoed the sound as it came to them.They could not help repeating any word or sound that came from the person that ordered them.An sudden or unexpected noise,as the report of a gun,the slamming of a door,etc.,would cause them to exhibit some phenomena.It was dangerous to startle them when they could injure themselves,or,if

they had an axe,knife,or other weapon in their hands. Since the time of Beard's observations accounts of their doings have,now and then,found their way into the newspapers.We are told that,on an order to jump,one of these peculiar people sprang from a raft into the river.It is related by O'Brien,an Irishman serving on an English vessel (naval),that an elderly and respectable Malay woman,with whom he was conversing in an entirely unsuspecting manner,suddenly began to undress herself,and showed amost ominous and determined intention of stripping herself completely,and all because a by-standing friend had suddenly taken off his coat; at the same time she manifested the most violent anger at what she deemed this outrage to her sex,calling the astonished friend an abandoned hog,and begging O'Brien to kill him.O'Brien,furthermore,tells of a cook who was carrying his child in his arms over the bridge of a river,while at the same time a sailor carried a log of wood in like manner;the sailor threw his log of wood on an awning,amusing himself by causing it to fall over the cloth,and finally letting it fall to the bridge;the cook repeated every motion with his little boy, and killed him on the spot.The same sort of thing has been observed in Malaysia,Bengal,among the Sikhs and the Nubians,and in Siberia,whilst Beard has observed it in the places named already.Crichton (Edin.Med.and Surg.Jour.,1829,299) says that,in Argusshire,Scotland, a leaping ague was observed.Under the name miryachit Hammond (New York Med.Jour.,Feb.16,1884) Has described an affection which seems to be essentially the same disorder as that of which the Jumpers are the victims. He quotes from the report of a journey,from the Pacific Ocean through Asia to Europe,by Lieutenant B.H. Buckingham and Ensigns Geo.C.Foulk and Walter McLean, of the United States Navy,an account of this disease. The party made their first observations on this affection while on the Ussuri River in Siberia.The captain of the general staff approached the steward of the boat suddenly,and without any apparent reason or remark clapped his hand before his face;instantly the steward clapped his hand in the same manner,put on an angry look,and passed on.When the captain slapped the paddle-box suddenly,the steward instantly gave it a similar thump.Some of the passengers imitated pigs grunting,or called out absurd names,etc.;the poor steward would be compelled to echo them all.The affection was known to the Russians by the name of miryachit.Both sexes were subject to it,but women more than men.The United States naval officers were informed that the malady was not uncommon in Siberia,and that it was commonest about Yakutsk,where the winter cold is severe.The act,in both of these cases took place independently of the will, a suggestion of some kind being given.There is another analogous condition known by the Germans as Schlaftrunkenheit,and to the English and American neurologists as Somnolentia,or sleeping drunkenness.In this state an individual on being suddenly awakened commits some incongruous act of violence,ofttimes a murder.Hammond, who mentions several curious instances,says that sometimes this appears to be a dream,but in others without

any discoverable cause.Mitchell remarks that the hysterical state,however produced,is a fruitful source of mimicry of disease in its every form,from the mildest of pains up to the most complete and carefully-devised frauds."Its sensitiveness and mobility",he says,"its timidity and emotionalness,its greed of attention,of sympathy,and of power in all shapes,supply both motive and help,so that while we must be careful not to see mimicry in every hysteric symptom,we must in people of this temperament be more than usually watchful for this form of trouble,and at least reasonably suspicious of every peculiar and unusual phenomenon."It is therefore very necessary not to fall into the mistake of supposing all cases of hysteria to be instances of neuromemesis,the question of which latter has also been ably discussed by Paget and others.

TRAUMA.

During the last fifteen or twenty years, a good deal of attention has been given to the influence of traumatism in the production of hysteria,which had hitherto been seldom taken into account.The troubles of the nervous system consecutive to shock,especially those of a railway accident,are recognized in pathology under the name of railway spine,given to them by Erichsen,by whom they were explained by the inflammation of the spinal cord and its membranes,which inflammation may extend to the encephalic region,and then be accompanied by cerebral symptoms.Erichsen's views were accepted by Erb and Leyden,and by physicians in general up to the publicatin of Page's work,which shows that the brain plays the part which had up to that time been attributed to the spinal cord,and that patients in a state of shock are in a condition analogous to that of the hypnotized.That hysteria and neurasthenia hold an important place in the pathogenesis of shock is a fact which is distinctly shown by the observations of Page,but which would also be deduced from the observations of Erichsen,and even of older writers.Charcot in particular - his views being at once accepted by Putnam,Walton,and others - has shown that the nervous symptoms of traumatism are related to the hysterical condition.The theory of the traumatic lesions of the spinal cord has been abandoned in Germany,but Thompson and Oppenheim attributed the symptoms of shock not to hysteria but to a special neurosis;to traumatic hysteria they added traumatic neurosis.This neurosis was characterized especially,according to them,by the tenacity of the disturbances of sensibility,and by a rather cheerful mental condition.Charcot argued with great persistence in favour of the analogy of the troubles seen after traumatism to hysterical symptoms.The fact of curability can hardly,as Oppenheim contended,constitute a characteristic of hysteria. Dubois (Corresp.f.Schweizer Aerzte,Sept.15,1891) affirms that accidents of all kinds may give rise to a variety of neuroses,in consequence of very slight traumatism in which the psychical element is the main factor;in most cases the phenomena resulting can

easily be placed in an hysterical category;and that very often hysteria is mixed with neurasthenic elements,or the latter may exist alone.The view that traumatic neurosis does not differ from hysteria as regards its symptomatology -enunciatted by Charcot - is the one that is most generally accepted at the present day.

AFFECTIONS OF THE ORGANS OF GENERATION.

Diseases of the genital organs have been considered for many years as exerting marked influence in the production of hysteria;but there are many who think that the influence of ovarian and uterine disease is no greater than that of other organs.The influence of these affections makes itself apparent in many ways: thus the chronic derangements in the nutrition of the entire organism,the general anaemia,produce an abnormal state of the nervous system.There is said,however,in addition,to be a specific influence.The peculiar nervous phenomena which appear in otherwise healthy women at the period of menstruation,during gestation,and in consequence of the excitement in connection therewith, offer a,proof that these organs possess an especial relation to the nervous system,This shows itself none the less plainly by the fact that in many cases of pronounced hysteria decided exacerbationsof existing symptoms occur during menstruation and gestation.Most clearly,however,does this appear in those cases in which symptoms of hysteria are called forth by the irritative pathological condition in the genitals,to alter in intensity with the variations in these conditions,and to vanish with their cessation.In such cases the influence of the central nervous system is unmistakable, and in great part induced by the sensory nerves of the sexual organs which are excited by pressure,irritation, or inflammatory processes.As a rule,moreover,the circulatory apparatus is directly implicated at the same time,as sometimes,on account of the local congestion, and the losses of blood in consequemce thereof,anaemia is induced in other parts,and,again,owing to a failure on the part of the vascular system to empty itself normally,plethora and congestive phenomena are produced. If,on the whole,more rarely than amaemic conditions, nevertheless these latter stages of abnormal vascularity most undeniably sometimes help to develop the hysterical tendency.In these rarer cases one observes the symptoms of the disease disappear as if an abundant evacuation ofblood from the circulatory apparatus had taken place.In spite,however,of the significance of physiological and pathological and patthological processes in the female genital organs (also perhpas also in the male),it must be distinctly understood that hysteria may develop independently of their influence. Not only does the occurrence in men prove this,but also its appearance in women at the time of life when the genitals play no part;and,further,as Briquet has shown, nuns,on the one hand,and prostitutes,on the other, are frequently victims of this malady.Besides this,one meets with it in mature life without any discoverable lesion

of the generative organs.Among hysterical patients specially examined,Scanzoni and Amann found 19 to 20 per cent. whose genitals were quite healthy.The statements of von Franque give a similar result.As in the practice of these three gynaecologists,at any rate, cases of hysteria with disease of the genital organs occur with unusual frequency,one may,according to these statements,say that at least a fifth and probably a much greater proportion of all hysterical women are free from such diseases.From a collection which Landouzy made of the reports of autopsies,from ancient and modern literature,it appears that in forty cases of hysteria,thirteen times,that is,in a third,cahnges in the genital organs,whether the uterus,the ovaries, or the Fallopian tubes were absent.It must,however,be determined by much more extensive statistics whether the numbers express the true ratio.I myself believe from personal experience,though I cannot give figures, that on investigation the presence of disease of the genital organs will be proved in scarcely a half of all hysterical cases.It must,moreover,be emphatically stated that even when they are present,these diseases frequently play the part of an exciting cause to a pre-existing tendency to hysteria;and,finally,that they may also make their appearance as quite accidental complications.Conversely,as regards the frequency of the occurrence of hysteria with affections of the genital organs,the statements of different gynaecologists on this point vary so extremely one from another that we must,in the meantime,refrain from drawing any definite conclusion on this head.Staements regarding the significance of different kinds of disease of the sexual organs are more agreed.Thus,it is generally stated that it is the most serious disorganisations of the genitals (cancer of the uterus,etc.) which furnish the smallest percentage of hysterical patients, while of women affected with versions and flexions of the uterus,as well as with chronic inflammatory conditions of that organ and the ovaries,a comparatively large number suffer from hysteria.One sees it also in those whose uterus is altogether wanting,and it is likewise not rarely observed in persons with that organ in an imperfectly developed condition.Much has been made of the significance in any case of the processes which occur in the genitals during gestation, delivery,and lying-in,both from the direct influence which they exercise upon the organism,and from the numerous diseases of the sexual organs which follow in their train.Scanzoni states that,of 217 hysterical patients whom he had treated,165,or 75 per cent.,had been puerperal,and that,of the latter,not less than 65 per cent.had been delivered more than three times at full term.Even without disease of the genital organs,menstrual disturbances occur in hysterical women,without its being always possible to state in how far they precede or cause the disease as an independent functional disturbance,or whether they are merely to be regarded as a symptom and consequence of it.At any rate,long-continued metrorrhagias may give

of the generative organs.Among hysterical patients specially examined,Scanzoni and Amann found 19 to 20 per cent. whose genitals were quite healthy.The statements of von Franque give a similar result.As in the practice of these three gynaecologists,at any rate, cases of hysteria with disease of the genital organs occur with unusual frequency,one may,according to these statements,say that at least a fifth and probably a much greater proportion of all hysterical women are free from such diseases.From a collection which Landouzy made of the reports of autopsies,from ancient and modern literature,it appears that in forty cases of hysteria,thirteen times,that is,in a third,cahnges in the genital organs,whether the uterus,the ovaries, or the Fallopian tubes were absent.It must,however,be determined by much more extensive statistics whether the numbers express the true ratio.I myself believe from personal experience,though I cannot give figures, that on investigation the presence of disease of the genital organs will be proved in scarcely a half of all hysterical cases.It must,moreover,be emphatically stated that even when they are present,these diseases frequently play the part of an exciting cause to a preexisting tendency to hysteria;and,finally,that they may also make their appearance as quite accidental complications.Conversely,as regards the frequency of the occurrence of hysteria with affections of the genital organs,the statements of different gynaecologists on this point vary so extremely one from another that we myst,in the meantime,refrain from drawing any definite conclusion on this head.Staements regarding the significance of different kinds of disease of the sexual organs are more agreed.Thus,it is generally stated that it is the most serious disorganisations of the genitals (cancer of the uterus,etc.) which furnish the smallest percentage of hysterical patients, while of women affected with versions and flexions of the uterus,as well as with chronic inflammatory conditions of that organ and the ovaries,a comparatively large number suffer from hysteria.One sees it also in those whose uterus is altogether wanting,and it is likewise not rarely observed in persons with that organ in an imperfectly developed condition.Much has been made of the significance in any case of the processes which occur in the genitals during gestation, delivery,and lying-in,both from the direct influence which they exercise upon the organism,and from the numerous diseases of the sexual organs which follow in their train.Scanzoni states that,of 217 hysterical patients whom he had treated,165,or 75 per cent.,had been puerperal,and that,of the latter,not less than 65 per cent.had been delivered more than three times at full term.Even without disease of the genital organs,menstrual disturbances occur in hysterical women,without its being always possible to state in how far they precede or cause the disease as an independent functional disturbance,or whether they are merely to be regarded as a symptom and consequence of it.At any rate,long-continued metrorrhagias may give

rise to hysteria by means of the exhausted conditions which they bring about.But the nervous system can be affected in a similar way by the increased vascular fulness and irregularities of circulation,caused by suppression of the menses.What I have already said sufficiently disproves the old theory that hysteria is exclusively a disease of widows and virgins.But there appear to be cases of hysteria in which the non-gratification of the sexual appetite,i.e.,sexual abstinence,exercises a certain influence as an exciting cause.Especially in the case of young widows,who were formerly in full enjoyment of sexual gratification, and in those women who,from impotence on the part of their husbands,cannot obtain the same gratification, does the disease sometimes develop itself,and may be cured easily by removal of the etiological factor. Some authors of large experience in the disease state that hysteria is more frequently caused by sexual over-irritation than by sexual abstinence - especially by onanism;also that it is the latter agency which is found with comparative frequency in cases of hysteria in men,in whom,moreover,chronic diseases of the urethra seem to play a part.Probably sexual abuse,etc.,are not such common causes of hysteria as the older writers would have us suppose.At any rate,further evidence is needed on the subject.As regards children,as both predisposing and exciting causes of hysteria various disturbances of the sexual organs have long been recognized.Masturbation is undoubtedly very common in young boys,and,while it seems,unless long continued, to have little appreciable effect upon those who are robust physically and mentally,on the weak and sensitive it produces various forms of nervous break-down, which may show themselves as major or minor hysterical affections.By some too much and by others too little stress is laid upon this cause.The constant irritation kept up by an adherent prepuce is a cause of hysteria which has attracted abundant attention;it is one of the peripheral sources of hysterical symptoms or paroxysms, and perhaps a more frequent one than many other local irritations,because the sexual organs and acts are the object of abnormal interest to both children and adults of hysterical tendencies.Sexual irritation sometimes acts directly through the mind,children from lewd conversation or reading,or the observation of indecent performances,become erotic and hysterical.While parents and guardians should pay strict attention to the protection of children from causes of this kind,they should be careful,on the other hand,not to lead those innocent of any knowledge or thought of such matters to their untimely consideration.Many children in the second year of life,or even earlier,practise masturbation;and this,by over-exciting the nervous system, may prepare the way for the development of hysteria, though it may not be the special cause of the disease.

DEBILITATION.

Hysteria may be excited by all the causes - many already enumerated - which lead to depression of the

general nutrition and of the nervous system.The moral causes are equally as efficient as the physical causes, for the simple reason that the emotions are inseparable from certain physical conditions identical with those which are the consequences of traumatic shock. It is not the lively emotions,such as fear and anger, which are capable of more or less suddenly causing hysteria,but habitual preoccupations are capable of producing the same effect.The exaltation of the imagination developed by a vicious education,religious enthusiasm,beliefs in imaginary powers,the fantastic tales of sorcerers,of ghosts,spirits,and the like already described,play an important part,as we have seen,in the production of hysteria,and especially of epidemic hysteria.The attempts at hypnitization often cause a moral shock which may be followed by hysterical explosions.Emotions occupy the first rank among the causes which determine the occurrence of hysteria,and of these those experienced in dreams may produce the same effects as those in the waking state.The habitual fear which is developed in maltreating children is pregnant with accidents of the same kind.As hysteria may be occasioned by general diseases and infections, we might also suppose that intoxications would have the same effect,since intoxications play an important part in infection;and this is,indeed,what actually occurs.Works which treat of the nervous accidents of plumbism contain many facts which are referable to hysteria.There is an identity between the sensitivo-sensorial anaesthesias of lead poisoning and those of hysteria.It has been shown that the hemiplegic symptoms of saturnism could be cured or transferred by the magnet or faradism,just as those of hysteria.Charcot and others since his time have conclusively proved the hysterical nature of those phenomena.Numerous cases of sensitivo-sensorial hemianaesthesia,combined with other manifestations of alcoholism,are to be be found in the literature.It was Charcot again,in 1886, who showed that many of the so-called hysteroid phenomena occurring in the course of alcoholism belonged really to hysteria,provoked by intoxication.Other toxic agents may produce the same effects,among them sulphide of carbon (Marie),tobacco (Gilbert),morphine, and opium.It is not only the chronic intoxications which may play the part of exciting agents in hysteria, but acute poisoning may have the same result.Thus hysteria has been seen to arise in the course of acute alcoholic intoxication,in anaesthesia from laughing gas,chloroform,and ether,as well as after the administeation of a toxic dose of camphor.Such debilitating factors as profuse diarrhoea and haemorrhages may also act as the exciting caise of hysteria,as the same is true of overwork in all its forms.Excessive physical labour may have the same effect,as may also severe mental work.Still,it must be remembered that intellectual overwork is found especially in men who are preoccupied with their studies or business,or in women who are overwhelmed with household cares,while among children the effects which have been attributed to this

are distinctly due to a morbid predisposition.Fatigue in any shape may provoke hysteria;and hysteria in men is often found in those who are engaged in the most severe kind of manual labour.All classes of prisoners,beggars,and vagabonds suffer from the disease.In general we may say that the causes of general depression of the organism can act only as exciting causes of hysteria,and that they cannot cause hysterical troubles in the absence of a predisposition. Both men and women have the above-mentioned determining causes in common.In women of certain classes which have been supposed to include the greatest number of hysterical subjects,such as domestic servants and prostitutes,we find united all the conditions of moral and physical debilitation or depression,such as insufficient or defective alimentation,the intoxications (alcohol),and the infections (syphilis).We see in this this an explanation of the fact that hysteria in women is less common in the country than in the city.Late hysteria is more common in women of the leisured classes,with whom the imagination is more active and the genital life closes later.Among the poorer classes, where the question of food is always an urgent one, the genital life comes to an end more quickly,and even in those cases in which want and excessive labour are not effective causes.Among the rich,however,sexual excitement is often increased as age advances,especially about the time of the menopause,and then becomes the point of departure for more or less grave hysterical accidents.Coitus reservatus has often an influence on the production of hysteria,as well as upon that of other nervous troubles.The malady can be excited by all forms of shock,whatever be their nature or intensity.When the organs of special sense are violently excited the result is akin to that of traumatism.Thus, hysterical symptoms may follow exposure to the electric light.Sydenham has observed hysteria following a fever which had been treated by venesection and repeated purgation;we here find several debilitating causes,one alone of which would have sufficed.Zambaco believed in the existence of hysteria symptomatic of syphilis,but the fact is that syphilis,especially secondary syphilis, often causes an invasion of hysterical troubles,which, however,have no peculiar features.Hysteria is really responsible for the cases of secondary syphilitic anaesthesia that have been described.Other general diseases are often the occasion of hysterical manifestations;such are,for example,pneumonia,pleurisy,acute articular rheumatism,malaria,scarlatina,influenza, diphtheria,and enteric fever.This point has already been dealth with.

P A T H O L O G Y.

In hysteria no gross changes are to be found in the central nervous systems.Though we may discover in a few exceptional cases gross lesions of these parts of various kinds,yet these can only,in the most favourable cases,be regarded as a few of the many influences under which like functional disturbances occur.In other cases,again,it is certainly only a question of accidental complications,as palpable diseases of the nervous system develop themselves in individuals,who are hysterically independemt of such.The further possibility of a gradual development,from long-continued hysteria, of structural changes,in portions of the nervous system which at first were only abnormally active,requires more proof,and facts are still not forthcoming.In an oft-quoted case of Charcot's (Lectures on the Diseases of the Nervous System),an old hystero-epileptic woman, affected for ten years with hysterical contracture of all the limbs,sclerosis of the lateral columns was found after death.On several occasions this woman experienced temporary remissions of the contracture, but after a last seizure it became permanent.This is one of the few reported cases showing organic lesion; and this was doubtless secondary or a complication. In a typical case of hystero-epilepsy at the Philadelphia Hospital,a report of which was made by J.Guiteras (Philadelphia Med.Times,1878-79,ix.,224-227),the patient,a young woman,died.Undoubtedly,as suggested by Charcot,in some of the graver forms of hysteria either the brain or the spinal cord is the seat of temporary modification,which in time may give place to permanent material changes.Old cases of chronic hysteria,in all probability,may develop a secondary degeneration of the cerebro-spinal nerve-tracts,or even degeneration of the nerve-centres themselves may possibly sometimes occur.The various theories that have been held down to the time of the publication of his celebrated treatise, in 1859,are epitomized by Briquet,and also an account of the autopsies on supposed cases of hysteria.We are told that about the sixteenth century,Rislau,Diemerbroeck,and Th.Bonet sought to establish a relation between lesions of the genital organs met with in the bodies of hysterical women and the affection from which they suffered.About 1620,Ch.Lepois believed that he had established the existence of certain lesions of the brain in cases of hysteria.Hochstetter and Willis, towards the beginning of last century,arrived at similar conclusions.That researches into the state of the genital organs have chiefly occupied those investigating hysteria is shown by the writings of Pujol, Broussais,Lovyer-Villermay,and,above all,by those of Piorry,Landouzy,Schutzenberger,and Duchesne-Dupare. Georget,Brachet,Girard,Gendrin,Bouilland,Forget,and

Lelut, about the fourth or fifth decades of the nineteenth century, made numerous autopsies on those dying when hysterical phenomena were in full activity, and concluded that the genital organs of these individuals revealed nothing in particular. This, in brief, is also the conclusion of Briquet. Jeanne d'Albret, the mother of Henry IV., who was all her life subject to hysterical headache, had her brain examined after death, but absolutely nothing abnormal was found. Vesalius made an autopsy with equally negative results on a woman who died from strangulation during an hysterical attack. Royer-Collard also found nothing in an old hysteric. Briquet believed that in some of the cases of Ch. Lepois, Hochstetter, and Willis diseases, such as meningitis (chronic) was present with the hysteria. Excepting a suspicion of a certain degree of congestion in various parts of the brain, he concludes that the anatomy does not show anything positive as to the seat or nature of hysteria. Hysteria was always referred to the uterus as regards pathogenesis. Hippocrates described the hysterical paroxysm, and its accompanying disorders, under the name of strangulation of the uterus. The ancients generally supposed that the disease originated in the ascent of the uterus to the diaphragm and throat. They believed that this accomodating organ could wander at will throughout the body, doing all manner of mischief. When Galen demonstrated the impossibility of such migrations, the opinion arose that, by the retention of the seminal fluid or blood in the uterus, a pernicious influence was exerted upon the whole organism. Sometimes this was effected by a decomposition of the fluids, sometimes by the invasion of hurtful gases (vapores), and, again, by pressure of the distended uterus upon the surrounding nerve distribution (per concensum). Later, this explanation was generalized so that irritative conditions of the sexual organs, as a whole, were supposed to be at the foundation of hysteria. Sydenham (The Entire Works of Dr. Thomas Sydenham, newly made English from the original, etc., by John Swan, M.D., London, 1763, pp. 416, 417) said that the disorders which are termed "hysterical in women and hypochondriac in men arise from irregular motions of the animal spirits, whence they are hurried with violence and too copiously to a particular part, occasioning convulsions and pain when they exert their force upon parts of delicate sensation, and destroying the functions of the respective organs which they enter into, and of those also whence they came; both being highly injured by this unequal distribution, which quite perverts the economy of nature." Speaking of the strangulation of the womb, or fits of the mother, he says: "In this case the spirits, being copiously collected in the lower belly and rushing with violence to the fauces, occasion convulsions in all the parts through which they pass, puffing up the belly like a ball". The idea that the uterus was the exclusive seat of hysteria was, after a time, in a large measure supplanted by the view that the sexual organs in general were concerned in the production of hysterical phenomena.

Romberg defined hysteria as a"reflex neurosis caused by genital irritation".Woodbury (Med.and Surg.Reporter, Dec.2,1876) in 1876, concluded that only where the pathological source of hysterical symptoms resides in the uterus or ovaries,cases may,with some show of propriety,be termed hysterical;and no symptoms can be correctly termed hysterical where the uterus and organs associated with it in function are not in a morbid condition.That hysteria does not occur most frequently in women with diseased wombs,but in those whose sexual systems,by pampering and and other processes,are abnormally developed and sensitive has been affirmed by Bridges (The Pathology of Hysteria,Chicago Med.Examiner, 1872,xiii.,193-199).He makes the same point with reference to the male sex.Sometimes,however,besides the emotional state in the male,there is actual disease of the sexual organs,caused by abuse or over-indulgence. Uterine disease and hysteria are sometimes like results of one cause,and not respectively cause and effect: women are hysterical oftener than men because the uterine function in woman's physiology palys a more important part than any organ of the male sex in the production of disease of the emotions.As the uterus and ovaries are the most important female organs,the truth would seem to be that they are in consequence,in hysterical patients,a frequent source of reflex irritation. Tempered with a certain amount of reserve,Seguin (On Hysterical Symptoms in Organic Nervous Affections, Archives of Electrology and Neurology,May,1875) adopts Brown-Séquard's hyspothesis that cerebral lesions produce the symptoms which point out their existence,not by destroying organs of the brain,but by setting up irritations which arrest,or inhibit,the functions of other parts of the encephalon.He says that he finds no difficulty in believing that the same symptom may exist as well without as with a brain lesion."In typical hysteria the functions of parts of the encephalon included in the right hemisphere,or in physiological relation with it,are inhibited by a peripheral irritation starting from a diseased or disordered sexual apparatus or other part;and in case of organic cerebral disease the same inhibitory action is produced."That in both kinds of cases we may have loss of rational control over the emotions,loss of voluntary power over one-half of the body,and loss of sensibility in the same part, is also his belief.The attempt of Dupuy (Med.Record, 1876,ii.,251) to frame a pathology of hysteria,as a matter of passing interest,is worthy of attention. According to him,every local hysterical phenomenon is dependent upon an abnormal state of either lateral half of the upper part of the pons Varolii.The centres of the pons,he holds,are perhaps merely passive in the process,and it is only when various forms of permanent contractures and paralyses occur that they become organically implicated.The exact condition of the cerebro-spinal axis during the existence of certain special grave ohenomena of hysteria,such as hemianaesthesias,hemiplegia,paraplegia,and contractures,must be studied in connection with the pathology of hysteria. The question arises as to what is the probable state

of the nerve-centres and tracts during these hysterical menifestations.If,for example,in a case of hysterical hemianaesthesia it is admitted that the brain of the other side of the body is somehow implicated,although temporarily,what is the probable condition of this half of the brain?Is the cerebral change vascular,or is it dynamic?If vascular,is the state one of vaso-motor spasm or one of paresis,or are there alternating conditions of spasm and paresis?Are true congestions or anaemias present?If the condition is dynamic,what is its nature?Is it mollecular? and if mollecular what does it consist in?Is it possible to say absolutely what the pathological condition is in a disorder in which autopsies are obtained only by accident,and even when obtained the probabilities are that with fleeting life depart the very conditions that we sought to discover?The vaso-motor and the dynamic are the two hypotheses that chiefly hold sway.The former,attractive because of its apparent simplicity,has been well set forth by Walton (Jour,of Nervous and Mental Diseaes, vol.xi.,July,1884,p.424 et seq.),who contends that while it may not be competent to easily explain all hysterical symptoms,it will best explain some of the major manifestations of hysteria,for example,hemianaesthesia.Hemianaesthesia,he argues,may appear and disappear suddenly;it may be transferred from one side of the body to another in a few seconds;so blood-vessels can dilate as in a blush,or contract as in the pallor of fear,in an instant.In fainting the higher cerebral functions are suspended,presumably because of vaso-motor changes;therefore,the sudden loss of function of one-half of the brain-centres,seen sometimes in hysterical hemiplegia and hemianaesthesia,may easily be imagined to be the result of an instantaneous and more or less complete contraction of cortical blood-vessels on that side.Neurotic patients have a peculiar irritable vaso-motor nervous system.He records a case seen in consultation with H.W.Bradford.The patient had a right-sided hemianaesthesia,including the special senses,the sight in the left eye being almost wanting. The fundus of the right eye was normal;the left showed an extreme contractility of the retinal blood-vessels under ophthalmoscopic examination;these contracted to one-third of their calibre,and the patient was unable to have the examination continued.The explanation offered is,that spasm of the blood-vessels on the surface of the left cerebral hemisphere had caused,by modification of the cortical cells,a right-sided hemianaesthesia,including the sight,and by extending to the fundus of the left eye an intermittent retinal ischaemia,and by reaching the emninges a left-sided spastic migraine.Rosenthal (A Clinical Treatise on the Diseases of the Nervous System,Vienna,1879) is responsible for the vaso-motor hypothesis,but,however,wrongly gives the spinal cord the predominating part in the production of the symptoms.According to this author,the anaesthesia and analgesia present in hysteria conform to the law as established by Voigt with regard to the distribution of the cutaneous nerves.The sensory nerves form

at the periphery a sort of mosaic corresponding to the analogous arrangement in the spinal cord."It is evident," he says,"that the peripheral disorders in hysteria merely represent an exact reproduction of the central changes,and that the latter are situated,in great part, in the spinal cord".He attributes a large part of the symptoms of hysteria to a congenital or acquired want of resistance of the vaso-motor nervous system."Motor hysterical disorders are also due in the beginning to a simple functional hyperaemia,but in certain forms the chronic hyperaemia may lead to an inflammatory process which may terminate (as in Charcot's case) in secondary changes in the columns of the cord and nerve-roots".He holds that the most serious symptoms must be attributed to reflex spasms of the cerebral arteries,and to the consequent anaemia of the brain,when in hysteria the cerebral substance is involved.Though difficult of explanation,the dynamic theory of the pathology of hysteria is probably that most usually accepted.Briquet says that hysteria manifests itself by derangement of the nervous action,and what is called nervous action is something like electricity.It is simply the result of undulations analogous to those which produce heat and light;in other words,it is a mode of movement.Wilks (Lectures on Diseases of the Nervous System,1883) compares some of the conditions found in hysteria to a watch not gping;it may be thought to be seriously damaged in its internal machinery, yet on looking into it there is found a perfect instrument that only needs winding up.As regards the brain being for a time functionless,the possibility of this is admitted by all,as in sleep or after consussion. He emntions the case of a young girl who had been assaulted,and had complete paralysis if motion and sensation.The shock had suspended for a time the operations of her brain,and organic life only remained. All the phenomena of hemianaesthesia can be accounted for if we merely suppose that a half of the brain is affected in this way.The changes,according to the dynamic theory,are supposed to be mollecular or protoplasmic,rather than vaso-motor or vascular,and the central nervous system is at fault in some way which cannot be demonstrated to the eye or by any of our present instruments of research.For the reason that innervation and circulation go hand in hand or closely follow each other,the view is held that both vaso-motor and mollecular changes,temporary in character, in grave cases of hysteria probably occur in the cerebro-spinal system.No matter what may be the temporary conditions,it is evident,on the one hand, that they are not states of simple anaemia or congestion,and,on the otherhand,that they are not inflammations or atrophies.Sudden recoveries could not be accounted for if the changes were organic.Patients with hysterical manifestations of the gravest kind,as a rule,are free for a time from their harassing and distressing symptoms;and this could not be if these symptoms were due to organic lesions.Abnormal states of consciousness are pointed to by Lloyd as the cause of most,if not all,of the hysterical symptoms.The

development of this idea constitutes his argument for the recognition of the disease as a true psychosis.In the reflex action,not only of the lower spinal cord and ganglia of special sense,but of the highest centres of the brain,he sees the explanation of many of the characteristics of hysteria.In other word,it is in the automatic action especially that he finds the sphere of the disease.A series of experiments on the artificial induction of convulsive seizures,bearing directly on the pathology of hysteria,have been made by Dercum and Parker (Jour.of Nervous and Mental Diseases, Oct.,1884,vol.xi.,pp.579-588).The experiments were performed by subjecting one or a group of muscles to a constant and precise effort,the attention being at the same time concentrated on some train of thought.The position most frequently adopted was the following: The subject being seated,the tips of the fingers of one or both hands were placed upon the surface of the table, so as to give merely a faint sense of contact,i.e., the fingers were held by a constant muscular effort barely in contact with the table and not allowed to rest upon it.It was seen that tremors commenced in the hands;these became magnified into rapid,irregular movements which passed from one limb or part to another until the subject was thrown into strong convulsions. Opisthotonos,emprosthotenos,and the most bizarre contortions were produced in various degrees.No disturbances of sensation were at any time present.Disturbances of respiration and phonation were often present in a severe seizure,and the circulatory apparatus was profoundly affected.A flow of tears,and occasionaly profuse perspiration,were sometimes induced.After severe seizures large quantities of pale urine were passed. The reflexes were distinctly exaggerated.No unconsciousness was ever observed,but a progressive abeyance or paresis of the will.The convulsive seizures were promptly arrested by nitrite of amyl.These two observers,in attempting to explain the phenomena in question,refer to the induction of Spencer as to the universality of the rhythm of motion.Through the whole nervous system of every healthy animal a constant rhythmical interchange of motion takes place.What might be termed nervous equilibration takes place.In man the will modifies and controls the action of the nervous system;it assists in maintaining nervous equilibrium when it is threatened.The will being withdrawn from the nervo-muscular apparatus,and this being subjected to strain, a disturbance takes place.Some of the convulsive and other phenomena of hysteria may be similarly explained. In a later communication,Dercum suggests a plausible and attractive theory as to the cause of the paralyses and anaesthesias in hysteria.He says:"As a result,we will say,of an emotional or other psychical shock,or possibly of a physical shock,the neurons of the arm centres of the cortex retract their processes in such a way that their under-tufts in the spinal cord no longer bear their normal relation to the spinal neurons. In other words,the connection between the cells is broken".He then assumes that as a result of suggestion,

either with or without hypnotism, the paralysis disappears. The removal of the paralysis, he then assumes, is due to the extension or protraction of the processes previously retracted, and the resumption of the normal relations with the spinal neurons then occurs. Though the view is one worthy of thought for consideration and investigation, it is obvious, of course, that before this theory can be accepted it must be proved that the neurons possess the power of movement.

S Y M P T O M A T O L O G Y.

In discussing the numerous and varied symptoms of hysteria I shall follow the plan of recognizing their division into two major groups: those which are essentially persistent - the "stigmata"; and those which occur incidentally, are intermittent or transitory - the "accidents" of hysteria. The former are not necessarily present singly or in combination; but, once developed, thend to persist so long as the affection lasts. The accidents present the greatest diversity in different patients, but usually, if they occur repeatedly, tend to uniformity in a given case. In the former group also may perhaps be included some of the hysterical accidents, such as paralyses or contractures, when they are of long duration and firmly established.

THE STIGMATA OF HYSTERIA.

Sensory, motor, and psychic are the three forms of the stignata of hysteria that admit of clinical recognition.

S e n s o r y S t i g m a t a.

These are usually present in a given case, and consist of anaesthesias and hyperaesthesias: the former possess the greater clinical interest and importance.

HYSTERICAL ANAESTHESIA.

Hysterical anaesthesias held the first place among the marks of the devil or the marks of witches, mentioned by demonologists who have described the nervous epidemics of the Middle Ages; but physicians were very dilatory in studying the troubles of sensibility. Sydenham had noticed certain facts of dysaesthesia, such as rachialgia, and Brodie had also studied several painful syndromes; but it was towards the end of the first half of the last century only that Piorry, Macario, and especially Gendrin, introduced into science the idea of the diffuse or hemiplegic sensitivo-sensorial anaesthesias. This was an important idea, for even if the anaesthesia is not a constant sign, it is one that is nearly always present. Briquet and Lasègue have made important contributions to this study, and they have since then been

followed by numerous observers, especially by Charcot and Pitres. General and special sensations may be affected under all their forms. Pitres has made a classification of the forms of cutaneous anaesthesia which deserves to be retained: 1. Anaesthesia may be total, that is to say, involving all the perceptions, and it may be complete or incomplete; 2. It may be partial, certain sensations only being affected, the others not: (a) it is analgesia when there is loss of the perception of pain with preservation of the tactile sense, (b) it is thermo-anaesthesia when the power of perceiving heat is lost, although the tactile and painful sensations are preserved, (c) anaesthesia may coexist with preservation of electrical sensation only. Analgesia is one of the most frequent troubles of cutaneous sensibility. A remarkable fact, which was noted by Lasègue, is that the patients themselves very rarely are aware of their loss of sensation, and it is only discovered accidentally, as when they have received a burn without perceiving it, or when a prick causes haemorrhage without having excited any sensation. It is therefore necessary to study the condition of sensibility with due care, and to look for anaesthesia. Richer recommends the use of diagrams to mark the intensity and distribution of the anaesthesia observed. It should be remembere that hysterical anaesthesia is not only superficial but also involves the nerves, which may be procked or compressed without result other than movements in the muscles to which they are distributed. The muscles may also be affected, but a muscle which is insensitive to pressure or other stimuli is none the less responsive as regards its motor functions; but, according to Pitres, the sensation of movement may also be affected as well as that of fatigue. The sense of position is lost; with closed eyes the patient is unable to tell the position of his hand, and cannot estimate the amount of energy necessary to maintain his equilibrium, and falls in consequence. Duchenne, of Boulogne, has described paralysis of muscular sense or of motor aptitude independent of sight, which falls into the same category as the preceding phenomena. In this case, as Lasègue has remarked, the touch with the healthy hand may supplement the muscular and visual sensations, warning the patient that the movement has been executed as he desired. The bones, the tendons, and the articulations may also be affected, and one may twist the joints or prick the tendons or the periosteum without exciting pain. Compression of the breasts, of the badominal viscera, or of the epigastrium may be made without exciting any of the sensations usually aroused by such acts, but certain organs - such as the testicle or the ovary, and occasionally the mammary glands - may give evidence, on the other hand, of an abnormal sensibility. The various forms of aesthesiometers now in use will serve to determine such disorders of sensibility as anaesthesia, analgesia, thermo-anaesthesia, and electro-anaesthesia. Sometimes tactile sensibility alone is preserved, the others being extinguished, the dissociations of syringomyelia being in this imitated by hysteria. Furthermore, not only may

the troubles of cutaneous sensibility be wanting,but the anaesthesia,instead of being total,may be dissociated,as noted in the classification of Pitres,-mentioned above,- so that only one of the sensations,that of heat, for example,may be destroyed.When the hysterical convulsions have passed off,we sometimes observe a general and total sensitivo-sensorial anaesthesia,which is, however,not permanent.Cutaneous anaesthesia,which is permanent and independent of the paroxysms,is,according to Briquet,rarely generalized,but is more commonly partial,hemiplegic,in disseminated islets or in systematic plaques.The hemiplegic form is a little less frequent than that in islets or plaques.In general,cutaneous hemianaesthesia coincides with a diminished cutaneous special sensibility on the same side,or exceptionally the anaesthesia and loss of sensibility occupy opposite sides.The hemianaesthesia is on the left side in nearly three -fourths of the cases.Circumscribed anaesthesia appears under the most various forms,and it is this especially which we must search for in examining a case of hysteria.As regards the sydtematic anaesthesia in plaques,we often see it circumscribed to the skin covering or surrounding the organs of sense,the functions of which are weakened or abolished,or limited to a region the muscles of which are paralyzed,whether of the face or of the extremities.It is not in cases of hysteria alone that we find the phenomenon of cutaneous anaesthesia superposed upon sensorial anaesthesia.As has been already noted above,usually hysterical patients have no knowledge of their anaesthesia,and discover it only by chance,upon the receipt of a burn or of a wound which leaves visible evidences,but which has not been felt,or when in suddenly moving from one place to another the impression of the changing temperature is distinctly different on the two sides.Many hysterical subjects,who have nocturnal fatigue or paraesthesia with sensations of numbness,cold,or tingling,are led thereby to discover their permanent anaesthesia,though the anaesthesia is not accompanied by any sensations of numbness and tingling.Sometimes a perversion of sensibility, a dysaesthesia,in which the skin cannot bear the least contact,or the slightest change of temperature,without experiencing pain,-accompanies the loss of tactile sensation.A diminished activity of the special senses on the same side is found in association with the dysaesthesia in question,which is unilateral.Under the name of aphalgesia,Pitres has described a variety of paraesthesia,characterized by the production of an intensely painful sensation through the application to the skin of certain substances which,in a healthy person,would cause only the ordinary sensation of contact; a metallic object,for example,produces a burning sensation.Besides the anaesthetic side,the healthy one may may have this painful sensation manifested in it.A weakening of certain reflexes accompanies the hysterical anaesthesia.Thus,when one tickles the feet of a hemianaesthetic hysterical subject,the reflex occurs exclusively,or very much more markedly,on the non-anaesthetic side.Tickling of the lateral surfaces of the abdomen

may sometimes also provoke only a weak reflex.Briquet says that the reflex of the nipple persists;Pitres,the sensitive pupillary reflex;and it is known that that also of the clitoris is not absent.Briquet is the only one perhaps who has been able to make out a local depression of temperature,though hysterical subjects complain sometimes of a sensation of cold,especially in the extremities on the anaesthetic side.Guichon has shown that the subcutaneous absorption of salicylate of sodium takes place equally well on the healthy and on the anaesthetic side;but this fact has no direct relation to the state of the skin itself.It is quite certain that punctured wounds often bleed less on the anaesthetic than on the healthy side.Pitres explains this fact by assuming a vascular hyperexcitability which is manifested under the influence of traumatism;but the fact is that the puncture becomes surrounded by an urticarial papule analogous to the phenomenon of dermographism. Romain Vigouroux has shown,however,that the electrical resistance is increased on the anaesthetic side;but as we can hardly,in the present state of our knowledge, understand this increased resistance otherwise than in consequence of a diminution of liquids,we may thereby infer that there is a diminished quantity of blood in the member and in the skin,and perhaps also a diminution of nutritive activity on the affected side,-just as exists in old-standing hemiplegia.In addition to the hysterical anaesthesia in the skin,we find the same condition in the mucous membranes and in the :

Special Senses.-For the purpose of diagnosis some of the changes in these are of great importance,and worthy,therefore,of special consideration.Vision is very often modified by the functional troubles of the eyes.The existence of hysterical blindness is shown to us in the miraculous cure of the blind during the mystic period of the history of hysteria.The general sensibility of the eye is affected as well as its special sense.The skin of the lids,the conjunctiva,and the cornea itself are devoid of sensation.When the cornea is insensible,while the patient regards fixedly a given object,we may bring a cylinder of paper in contact with the cornea without producing any effect,the lids and the eye itself remaining motionless as long as the foreign body is not brought within the field of vision. The oculo-pupillary reflex is obtained as promptly as in the normal state,if,instead of bringing the paper in contact with the conjunctiva,we bring it a certain distance in front of the pupil;the reflex is then determined through stimulation of the retina,which may have lost the perception of colours,but which still distinguishes light from darkness.There is general a relation between the intensity and the extent of the anaesthesia of the integuments and the diminished special sense. Hemianaesthesia hysterical subjects who have no narrowing of the visual field,nor achromatopsia,preserve the sensibility of the conjunctiva;those who have lost the power of perception of one or several colours,and have a more or less marked narrowing of the visual field, have also anaesthesia of the conjunctiva.Those who have

complete achromatopsia with almost no visual field have lost not only the conjunctival sensibility but also that of the cornea. Still, the lachrymal reflex is, by contact with the conjunctiva, excited as under ordinary circumstances, and is therefore not ordinarily lost. That anaesthesia of the external auditory canal is the more marked as deafness is the more pronounced has been shown by Walton and Gradenigo, who also dwell upon the relation between anaesthesia of the integument and the loss of special sense. Narrowing of the visual field is believed by Charcot to be one of the most important signs of visual anaesthesia, and by Dana perhaps the most frequent. This narrowing may be roughly appreciated by having the patient to look steadily at the nose of the observer who moves his finger in all directions towards the point of fixation; but a special instrument (the campimetre) is necessary for a regular examination, the results of which may be measured on the charts which are in ordinary use in most clinics. The normal visual field is not circular, but extends further outwards and downwards, while the inner and upper borders are less projecting. As a rule, the narrowed visual field preserves the normal shape, that is, the contraction is concentric. However, the regularity of the visual field can be determined only when the examination is made rapidly, and while the patient is alone with the examiner; for hysterical subjects have very rapid modifications of sensibility under slight influences, such as noise, a change in the light, etc., all these influences may cause apparent irregularities in the visual field. We may say that ninety time out of a hundred the narrowing of the visual field is bilateral, as are all the other visual troubles, but, as a rule, one is more narrowed than the other, and the side of the greatest contraction is ordinarily that affected with the hemianaesthesia. Total blindness is exceptional, and when it occurs is ordinarily temporary only, occurring after a convulsive paroxysm, or under other accidental conditions. Nearly fifteen years ago Freud showed that hysterical hemiopia had not been seen, and that its occurrence was not probable; and the contrary opinion has not been established by the cases reported by Janet, Lannois, Tournier, and others since then. Usually both vision for colours and that for white light are affected by the narrowing of the visual field. In the normal state the visual field for white light is the most extensive, and after that come, in the order of their extent, blue, yellow, orange, red, green, violet, the field for which is the narrowest of all. In hysteria the field for colours is contracted concentrically in the physiological order, that is to say, the field for violet may be so narrowed that this colour is no longer perceptible, and the fields for other colours disappear successively. It is the rule, however, according to Charcot and Parinaud, that the field for red is narrowed the least and disappears the last. The latter observer says that sometimes even the field for red is more extensive than that for white light. Sometimes the vision for colours disappears completely while that for form persists, and the patients

perceive objects as of a gray or dirty-white colour only. It is not excessively rare to see the vision for colours disappear in the two eyes in a different order. According to Parinaud, rarely the narrowing of the visual field coincides with a central scotoma. In general the field for colours is more affected on the hemianaesthetic side, but it is as changeable as are the other modifications of sensibility, being often more marked after a paroxysmal attack. As a rule, the acuteness of sight undergoes but little modification, and it is quite exceptional to find that the acuteness of vision is affected in the same measure as the visual field. Parinaud has noticed that diplopia or monocular polyopia very frequently accompany hysterical amblyopia. A pencil, or other object, is placed near the eye and gradually drawn away from it. At first it is seen single, but at a distance of from ten to fifteen centimetres a second image appears, usually on the temporal side. As the object is made to recede from the eye the two images separate from each other, and not very uncommonly a third, less intense, image appears on the opposite side. If the object is still farther removed, the images become blurred, and are no longer seen distinctly. Parinaud has pointed out that, upon moving the object away from or towards the eye, we may observe at the same time very marked macropsia or micropsia; and also that in unilateral hysterical amaurosis, the eye which does not see when the other is covered may see in binocular vision, and especially in stereoscopic vision; further, as the visual field still remains narrowed, the reëstablishment of the sight in the amblyopic eye at the moment of binocular vision has regard only to central vision. The patient is able to perceive the compound colour if we revolve before an hysterical subject a disc on which are painted complementary colours, the perception of one of which at least he has lost. This experiment of Regnard shows that the loss of vision is of central origin. The fact noted by Parinaud of the reëstablishment, in binocular vision, of central vision, with persistence of the narrowing of the visual field in the amaurotic eye, indicates that there are separate cerebral centres for peripheral and for central vision, and that in central vision each eye is in relation with the two hemispheres. The experiments of Pitres, with the Flees box, point in the same direction. Double amblyopia, as well as unilateral hysterical amblyopia, may pass unperceived. Hysterical midriasis - the exact nature of which is shown by the coincidence of stigmata and by the fact of recovery - may be independent of amaurosis. The latter, when total, is usually transitory. Dyschromatopsia may interfere with certain occupations in which there is a necessity for distinguishing between colours. The fact of the visual troubles of hysteria having attributed to these various maladies can be explained by the coexistence of hysteria with a great number of affections of the nervous system. It should be remembered also that most of the troubles of vision in hysterical subjects, and especially the modifications of the visual field, may be provoked by all the conditions which lead to a sudden depression of the

nervous system,even by fatigue;and,further,that in hysteria the visual defects present a considerable variability.The concentric narrowing of the visual field,the dyschromatopsia,and the diminished acuity of vision are frequently manifested after an epileptic attack.Even in these cases,just as in hysteria,the superposition of tegmentary anaesthesia may be observed. In epileptics one may find permanent troubles of vision, especially narrowing of the visual field.We cannot regard these troubles as absolutely characteristic of hsytera, though in that affection they are apt to be more marked and variable than in almost any other disease.Migraine, of ophthalmic origin,may be suffered from by the subjects of hysteria,and it may be accompanied and followed by a more or less regular hemianopsia;but,apart from from this connection,hemianopsia does not appear to figure among the visual troubles of hsyteria.An hysterical attack may sometimes be provoked by a strong stimulation of the retina by a bright light.Though ocular hysterogenic spots are rare, sometimes the integuments of the eye,the cornea,conjunctiva,and eyelids are endowed with a morbid sensibility,so that the least touch will excite a paroxysm.

In hysteria there may be some affection of the senses of taste and smell,the former at the same time as the sensibility of the buccal mucous membrane.In order to appreciate this form of anaesthesia,it is necessary to place at the posterior portion of the tongue,on each side separately,solutions of certain crystallized sapid substances of known strength.As a rule,gustatory anaesthesia is unilateral if the general anaesthesia be unilateral,but it may be general,or wanting,when there is a unilateral loss of general sensibility of the mucous membrane.According to Henrot, when gustatory anaesthesia exists,general anaesthesia is never wanting;and Lichtwitz remarks that the gustatory field may be narrowed and restricted to the posterior part.The field of electrical sensation is also diminished,and sometimes this sensation is wholly abolished.The disturbances of taste,which render all food insipid,play an important part in the tendency which all hysterical subjects have to prefer highly seasoned food or substances which have a peculiar taste or odour.Although the reflex salivary secretion does not appear to be affected,they are also of importance in the etiology of anorexia.As a rule,generally sensibility is abolished,but von Rabenau claims to have seen tactile sensibility alone preserved.Though,according to Lichtwitz,not related to other forms of sensibility, galvanic sensibility is generally diminished.Anaesthesia of the epiglottis is spoken of by Charion as a pathognomonic sign of hysteria;but Gougenheim points out that in non-hysterical persons even anaesthesia of the larynx - which is usually bilateral,even when the skin is affected on one side only - is often encountered,and may be wanting in those who are suffering from the disease. Lichtwitz holds that the mucous membrane of the nose is the least frequently affected in general anaesthesia.Nevertheless,most observers state that it follows the usual law.The loss of smell spares the side which the the general anaesthesia spares,

from which it follows that the patients are wholly ignorant of their loss of sensation. We must study changes in special sensation by Passy's method, that is to say, by the use of solutions in definite proportions of crystallized odoriferous substances, evaporating in a vessel of given capacity.

Hearing is often greatly diminished, but complete hysterical deafness id very uncommon. It is on the hemianaesthetic side that deafness manifests itself most markedly. This deafness usually varies in intensity in proportion to the general anaesthesia. Deafness for sounds transmitted by the cranial bones is, according to Walton, greater than that for sounds transmitted by the air. There is at the same time a narrowing of the auditory field, and the power of appreciating distance is weakened. Gellé says that the biauricular reflexes persist. Hysterical deafness, which is frequently not perceived by the patients themselves, is often accompanied by subjective noises, such as the ringing in the ears and whistling sounds, with sometimes, remarks Briquet, a sensation of painful tenderness. These sensations must be distinguished from those which precede the hysterical attack and constitute the aura. Sensory troubles corresponding to those of special sense, are found in the auditory canal and in the tympanum. Ledantec found that a narrowing of the auditory field accompanies the hysterical impairment of hearing.

Distribution of Hysterical Anaesthesia.

This admits of a certain amount of variability. Although Briquet has remarked that the mucous membranes of the lower portions of the body are less often anaesthetic than those of the upper portions, it is not only the mucous surfaces belonging to the organs of special sense which may become anaesthetic. The anal mucous membrane is said rarely to be affected, and the same is true of those of the urinary passages. In some cases, however, the patients are unable to detect the passage of faecal matter, which takes place without their consciousness when they suffer from diarrhoea. The contact of urine may also be unfelt just as that of a sound passed through the urethra. It may be that the need of urinating is no longer felt, and the patients thus are found to have retention of urine. Briquet considers anaesthesia of the genital mucous membrane more common in its occurrence. It is found on the internal surface of the labia majora and minora, and along the wall of the vagina as far as the cerviv uteri. The clitoris may also be anaesthetic; or, in some patients, it alone is sensitive in the midst of an anaesthetic area; or, again, it may be anaesthetic and yet retain the power of erection in response to certain special forms of irritation. In man, the mucous membrane of the prepuce may be anaesthetic while the glans preserve its sensibility. On the external genitals the anaesthesia may be unilateral. Whether the anaesthesia be unilateral or general, hysterical women affected with it are usually indifferent or insensible to coitus, and erection of the clitoris may occur without the

patient being conscious of it.

Peculiarities of Hysterical Anaesthesia.

Though sometimes preceded by certain subjective sensations, such as tingling, formication, numbness, burning, etc., hysterical anaesthesias are usually insidious in their onset, and when looked for are found fully developed. When they come on suddenly it is generally after a traumatism which has produced a general shock, or it may be also after a local irritation. Sometimes the anaesthesia is preceded by a dysaesthesia; and, moreover, cutaneous dysaesthesia, as well as anaesthesia, ordinarily accompanies sensory anaesthesia of the same side. The term hyperaesthesia, being very inexact, will probably some day be discarded. Though preserving in certain cases the same distribution for years, even for a long time after the other hysterical symptoms have disappeared, the anaesthesia is, in general, variable in its intensity. Some form of anaesthesia, persisting up to old age, is seldom absent in the adult, especially in man, but it is often wanting in the child. Local anaesthesias may present the same persistence, especially when they are in relation with local troubles of another form, such as paralysis, contracture, etc. The anaesthesia seems to vary spontaneously, so slight and ephemeral may be the influences which provoke these variations; all physical agents may exert an action on it. It is often more marked in the morning when the patient awakes; it is influenced not only by darkness, but also by sleep and inaction. The stimuli of sight, hearing, touch, smell, or taste may modify it in various ways; moderate stimuli diminish it, very intense or painful ones may increase it. The influence of stimuli applied to the skin was recognized by Duchenne, of Boulogne, and by Briquet, who noted that faradic electrization restores the sensibility rapidly over a more or less extensive area surrounding the point to which the stimulus has been applied. The organs of special sense, and their mucous coverings, may participate in this restoration, but amblyopia often proves refractory, as does also muscular anaesthesia. Other cutaneous stimuli may have the same effect, as, for example, vesication, friction, the application of croton oil, sinapisms, metallic points, magnets, and mechanical vibrations. All these agents have been grouped under the name of "aesthesiogenic". A committee appointed by the Société de Biologie of Paris, composed of Charcot, Luys, and Dumontpallier, to whom was added Gellé, Landolt, and Regnard, undertook the study of these agents; and it was in the course of these experiments that Gellé discovered, by means of his binocular tube, the phenomenon of transference, and that the consecutive oscillations were studied by Charcot. The sensibility is restored by the stimulus first over a limited area, and little by little the sensible zone extends until sometimes it embraces the entire hemianaesthetic side; then the anaesthesia reappears in patches - the return anaesthesia of Burq - in the parts in which the sensation had been restored the most recently. This phenomenon, which may last for half a minute to nearly an hour, is accompanied by other,

no less interesting phenomena.For example,pricks which were bloodless on the anaesthetic skin begin to exude blood,the temperature rises as the sensibility returns, and the strength of voluntary movements,measured by the dynamometer,increasesconsiderably in the affected member. If the stimulus is applied to a limb of the healthy side, we see anaesthesia appear at the point of application of the aesthesiogenic substance,and spread from this as a centre.Whichever may be the side on which the application is made,we see the passage of the anaesthesia from one side to the other;this is the phenomenon of transference,which is constituted by a series of ascillations,or of passages of insensibility,from one side to the other.Following these oscillations the hemianaesthesia may disappear,or at least remain less pronounced. Sometimes the hemianaesthesia remains stationary for a time on the side opposite to that in which it was primarily,or it may remain on the same side on which it was before without any appreciable change.A few minutes,or an hour or more,would cover the duration f the consecutive oscillations.A transference,just like those agents which act locally,may be provoked by a certain number of agents which cause a momentary general stimulation; such are static electricity and hot and cold water.Subcutaneous injections of pilocarpine,or inhalations of nitrite of amyl,ether,or chloroform,may provoke a transference,consecutive oscillations,and a return of sensation.There will be observed a certain increase of strength on the normal side,appreciable in registering, by means of the dynamograph,the variations of energy of voluntary movements occurring in transference.Over a given patient all aesthesiogenic agents have not the same influence.Some have no effect at all,and others exhibit great variability.There is a good deal that we do not understand regarding their physiology;and though their action has been referred to the inagination,or to electrical currents,we are still in ignorance.Certain painful phenomena may be cured by the application of revulsives to the opposite side.The same means may provoke a transference of the epileptic aura.Even in healthy subjects,similar effects have been noted.Hoppe,for example,has observed that if the thumb or index finger is firmly pinched,a notable diminution of sensibility is caused in the corresponding parts nn the opposite side,and other observers have reported facts of the same nature,with which also we may compare synkinesis and the synalgesias.The transference may be obtained also in hemianaesthesia with organic base,according to Vulpian,Bourceret,and Grasset;so that the hemianaesthesia due to lesion of the posterior third of the internal capsule,which differs in no way from hysterical anaesthesia,even in the character of the visual disturbances, cannot be distinguished by this phenomenon either.Neither can the absence of cerebral lesion be deduced from the absence of paralysis of the inferior facial,for this symptom may be wanting in case of the organic lesion in question,and in hysteria,the contrary opinion notwithstanding,one finds it usually to a certain degree. That the anaesthesias of syringomyelia may have a distribution on the surface of the body like that of the

hysterical anaesthesia,- in limited geometrical zones, in segments of the limbs,under the hemiplegic form, etc.,- has been shown by Charcot.On the other hand,we may see the syringomyelic dissociation of sensibility in hysteria.Though a diagnosis may easily be amde from the symptomatic associations,if to the clinical picture of syringomyelia we add the narrowing of the visual field(which Dejerine and Tuilant have included among its symptoms),we shall see that syringomyelia may present disturbances of sensation very similar to those observed in hysterical persons.

HSYTERICAL HYPERAESTHESIA.

Hysterical hyperaesthesias,or dysaesthesias as many authors prefer to call them,are very common. Such painful sensibility may affect the same parts as anaesthesia,and,like the latter,also may affect all the modes of sensation.The apin may be provoked by simple contact,by pricking,by cold or heat.The dysaesthesia manifests itself under different forms;sometimes the patients complain of a sensation of burning,of tingling, of stinging,of numbness or of heat,and sometimes they describe their sensations with a richness of extraordinary metaphorical expressions which may assume a truly delirious character.Thus the handle of the door may really seem to the patient as if almost red-hot,and it be beyond her courage to take hold of it.The hyperaesthesia of the skin is seldom general,being usually disseminated in islets or in systematic areas.It may present the same variations in its d istribution as unilateral anaesthesia,and may manifest itself spontaneously,or may be provoked by external stimuli.Hemihyperaesthesia is rare,and in cases in which it is observed it is,as a rule,coincident with an anaesthesia of the special senses,and it continues for some time after the other troubles,the muscular contractures or arthralgias,have disappeared.We must not comfound hypnotic hyperexcitability with sensory hyperaesthesia properly speaking.Dysaesthesia,distributed in systematic regions is generally accompanied,like anaesthesia, with motor troubles,and especially with contractures or spasms.It attacks the conjunctiva,with the cutaneous surface of the eyelids,in blepharospasm,the mucous membrane of the vagina in vaginismus,and so on;but it rarely affects the mucous surfaces alone.Further,it may involve a joint;such hysterical affections of the joints were first described,in 1837,by Brodie,though Briquet says that Hoffmann was the first to make mention of arthralgia of this kind.The latter observer thought that most of the joint affections of the upper-class women were due to hysteria,but Briquet does not regard the affection as so common as that.It may be located in all the large articulations,but it is found chiefly in the knee,the wrist,and the hip.Ordinarily it is limited to a single joint,but it may affect two joints symmetrically.When it is unilateral it is found most frequently on the left side,like most of the other affections of hysteria.Traumatism plays the chief rôle in the production of these arthralgias,which we see following a

shock,a fall,or a convulsive attack which may be accompanied with articular distortions.The slightness of the cause has led Paget,and others, to admit the theory of a psychical influence,which is,they hold fuethermore, manifested in mimetic cases.The psychical influence has the advantage of being always present,and of constituting a simple explanation,but really it is no explanation at all.We must consider also the possibility of a family weakness,and not regard imagination as the sole factor, in such a case,for example,as when a child becomes affected with an hysterical coxalgia in the presence of its brother who has an organic coxalgia.Children may show hysterical arthralgia,so may men,but it is far more common in women,and may be the first symptom of which an hysterical patient complains.But even when pain is the first symptom,the contracture of the muscles which move the affected articulation is not slow to appear, and disables the patient's member,and it is rare that the pain remains the only symptom.The pain is increased by pressure and movement;it is rarely limited to one point,but extends throughout the whole limb;and pinching of the skin is usually more painful than pressure on the joint.As a rule,the cutaneous pain is more marked in a segment surrounding the affected articulation, and in the part above.When the muscles are contractured the integument covering them often becomes itself painful.Sometimes the dysaesthetic zone becomes so irritable that the least contact produces a convulsive attack.In hysterical coxalgia there may be pain in the knee just as in true tuberculosis of the hip;but,as a rule,the nocturnal pains are absent in the hysterical;furthermore, distraction singularly moderates the pain,which is,on the contrary,increased by the simple attempt at examination.In hysterical coxalgia the limp,which is only exceptionally noted,since the contracture is so excessive that the patient refuses all attempts to walk,is often irregular,intermittent,and choreiform.The attitude of the patient and the deformity may simulate exactly organic hip disease;but the contracture is often exaggerated,involving almost the entire member,or,at any rate,muscles which have nothing to do with the painful articulation.Sometimes there is observed a swelling, which has no resemblance to that accompanying suppuration,and which must be attributed to oedema;in general, whatever may be the articulation affected,there are no other symptoms than pain,contracture,and loss of power.It may happen sometimes that the hysterical arthralgia is accompanied by muscular atrophy presenting the characters of the atrophy following organic affections of the articulations,according to Baginsky and Charcot, the reaction of degeneration and fibrillary tremors. This muscular atrophy may be accompanied by a lowering of temperature in the affected member.Although muscular atrophy is less common in hysterical than in organic arthralgias,it is apt to be more extensive in the former;instead of attacking exclusively the extensor muscles of the joint (the gluteal muscles in the case of hip disease,the triceps femoris in that of arthritis of the

knee),it involves often the muscles below,and those having no functional relation with the painful articulation.In several cases of hysterical arthralgia,in which amputation has been performed,the articulation has been found perfectly sound.When the patient is examined under chloroform narcosis,also,it is found,as soon as the relaxation of the contractured muscles is complete,that the movements of the joint are perfectly free.As the effect of the anaesthetic wears away,the stiffness returns before the pain,and the dysaesthesia is reëstablished in the superficial parts before it is in the deeper ones.The hyperaesthesia of the skin is the last to disappear with the departure of the disease, and a forecast of the case should not be given until this has been accomplished.The hysterical arthralgia may result in the formation of fibrous adhesions,under the influence of prolonged immobility,just as do contractures of long-standing;the cartilages may become eroded at the points of contact,and the bones may possibly undergo a certain amount of fatty degeneration.The disappearance of an hysterical arthralgia may be sudden or gradual.The affection may subside suddenly,but more commonly it disappears gradually.Myodynia,often connected with rigidity,is more frequent.Perhaps the only form of painful tendon is achillodynia.It sometimes happens that a rheumatic or tubercular arthritis become engrafted on an hysterical arthralgia.The joint,which was probably already a point of lessened resistance,since it has been selected by the neurosis,has now become so without question in consequence of the apparent or real trophic disturbance.In other cases,an hysterical affection in one joint is associated with an organic one in another. Thus,in a tuberculous subject already suffering from an organic affection of the foot,there may develop,under the influence of a previously existence neuropathic condition,various painful contractures which involve the muscles of the hip,and give rise to a diagnosis of coxalgia;but all the symptoms of such an affection disappear as soon as the patient is brought under the influence of chloroform.The discovery of "Hysterogenic" or "spasmogenic zones" was made by Charcot,who,in 1873, described the ovarian hyperaesthesia of the hysterical, and showed that the hysterical attack was often preceded by an aura which started from the ovarian region;and that,in certain patients,pressure in this region may provoke an attack or arrest one.Following this,he discovered other regions in which the same peculiarities were to be observed.The term hysterogenic zone may be defined as a circumscribed area,painful or not,which is the seat of special sensations,constituting the prodromes of the attack,and compression of which may provoke or arrest the paroxysmal phenomena,either wholly or partially.This definition indicates that the hysterogenic zone may indifferently either provoke or arrest the spasmodic paroxysms,but rather commonly a zone endowed with special irritability has only the provocative or the suspensory property,and not both.Pitres says that sometimes a zone is provocative on superficial pressure and suspensory on deep and strong pressure.These zones

are either tegmentary or deep;the tegmentary zones may be found on the mucous membranes as well as on the skin; the deep zones are most commonly visceral - ovary,mamma, testicle.These hysterogenic zones are not always spontaneously painful,and sometimes they are discovered only as a result of a most careful examination,which in itself may be the occasion of the first convulsive seizure. They may be single or multiple.In general we are unable to discover the cause of their localization,but in the case of man it will perhpas often be noted that the hysterically painful testicle is an abnormal one.The head and trunk are the seats of predilection for these zones,but they are also seen on the extremities,especially in the articular folds.Their extent varies,we may say,indefinitely;sometimes they are limited to a spot which may be covered with the tip of the finger,at other times they cover an extended area.Gaube remarks that when the zones are spontaneously painful the patients often assume special attitudes to protect them from all contact;but it is not only by pressure that the hysterogenic properties of these zones are manifested, for the same effect may be produced by cold or heat. The special or neuralgic sensibility of these zones is very variable,and is often inceased upon the approach of a paroxysm.The hysterogenic zones may be situated in the midst of an anaesthetic patch,and in general in hemianaesthetics they are found on the same side as the anaesthesia.As a rule,there is no visible change in these areas,although buet has observed a loss of hair over the hysterogenic zones on the scalp.After a paroxysm,or under various conditions,the hysterogenic zones may disappear,change their position,or lose their property in part.The influences which may cause a change of location are those which may act simultaneously upon all the zones of the body,or only upon those in a special part.Among the general measures are static electricity, galvanization of the nerve-centres,and inhalations of anaesthetic substances.The local measures are local anaemia,such as that which results from the application of a Esmarch's bandage,refrigeration,by an ether spray and the like,sinapisms,hypodermic injections of even simple water,local faradization,or galvanization.The stimuli should be applied at the periphery of the hysterogenic zone,especially if they are electrical.In cases of cutaneous zones,especially if they are spontaneously very painful,direct applications may excite an hysterical paroxysm.The peculiar characteristics of some of these hyperaesthetic or hysterogenic zones call for special mention here.The "clavus hysericus",well known to Sydenham,is one the most frequent painful phenomena in hysterical subjects,being,according to Briquet,found in six cases out of seven.It may have its seat on any part of the head,but most commonly it is found in the temporal regions,or over the sinciput;its area is very limited.The patients compare the pain which characterizes it to that which would be caused by the driving of a nail into the skull,or by the application of a hot coal,or of a piece of ice.The pain may be superficial, or it may appear to be seated deeply in the bone,or in

the brain itself;it is sometimes relieved by pressure. It is continuous in character,and may last for a few days to several weeks.Briquet says that it is very frequently accompanied by chills,vomiting,digestive troubles, and sometimes by fever.It is in the category of cases in which the latter symptoms occur that the meningoencephalic and meningitic forms of hysteria belong. These forms,which are seen especially in women,may, according to Sollier and Ollivier,also be encountered in children.The onset may be sudden,or it may be preceded by prodromes,resembling in every respect those of tuberculous meningitis;and the latter symptoms,such as such as violent cephalalgia,vomiting,diplopia,delirium, prostration,the so-called "tache méningitique",and obstinate constipation,all tend to keep up the simulation. The liability to error is much greater when fever is present,yet it would seem that the fever,when present in pseudomeningitic hysteria,is always due to some other cause,such as angina,vaginitis,etc.,and thesame must,of course,be carefully searched for.Apart from this,the knowledge of the patient's antecedents,the coexistence of troubles of sensibility,and other signs of hysteria,and especially of the hyperaesthetic areas on the scalp,together with,as a rule,the absence of fever, will render the diagnosis of hysteria easy.There are certain phenomena which should properly included among the painful paroxysms that have been described among the painful stigmata of hysteria.Thus,we may mention ophthalmic migraine which is not rare among hysterical subjects,and which is sometimes so closely associated with other hysterical symptoms that it appears to form part of the symptom complex.We also sometimes see paroxysmal facial neuralgia which presents the characteristics of hysterical manifestations,and which is accompanied rather frequently by systematic hyperaesthesia of the skin and mucous membrane.Sydenham recognized hysterical odontalgia,and several writers have also reported cases of facial neuralgia.Charcot noted the vesperal character of hysterical neuralgia,comparing it with the matutinal character of ordinary tic douloureux.Briquet found that compression frequently relieved the pains in the head,and the method is well worth a trial in obstinate cases.The same author has described in detail,after Sydenham and Brodie,the phenomenon knwon as hysterical rachalgia.It appears to be very common,and there seem to be very few hysterical persons who have never experienced pain in the back or spinal column.It is seated along the line of the spinal apophyses,and hardly ever passes beyond the line of the spinal grooves;it may extend along nearly the entire length of the dorsal spine,but more commonly it is limited to two,three,or four vertebrae.Sometimes the pain is deep-seated only, but,as a rule,there is also an exquisite sensibility of the skin,the least touch of which is the signal for a violent reflex explosion.Usually the significance of this pain is well recognized by the patient who assumes more or less strange attitudes,in order to avoid any contact which might excite attack.Briquet noted the hysterogenic property of these rachalgic points.Alongside of these spinal pains which have the permanent

characters of stigmata,we have to note other dysaesthesias of the thoracic walls,such as thoracalgia and pleuralgia,the general character of which is that the pain is seated in the skin;and by this we are able to distinguish them from the pains due to affections of the cord, which they strongly resemble.Motor trouble,paralysis or contracture,may be added to the sensory affections,but, as Brodie remarked,it is not that the muscles do not obey the will,it is that the will does not act.Sometimes the motor and sensory troubles are accompanied with an apparent deformity of the spine,as P.Richer has shown. Grancer says that in children says that the different troubles may be mistaken may be mistaken for manifestations of vertebral rachitis.In all these cases a search for other stigmata is very important from a diagnostic point of view.We often see associated with rachialgia a pleurodynia,which may sometimes have the character of a girdle pain,and which may make us the more think of tabes dorsalis since the latter affection may coexist with hysteria.Pain in the epigastrium,gastralgia,or hapatalgia (which may present resemblances to tabes dorsalis in the respects of crises of a visceral character) may be associated with the thoracic pains.We may sometimes note among the various forms of thoracalgia a variety known as hysterical angina pectoris.Landouzy holds that it corresponds to true angina pectoris in its symptoms,and that it may cexist with organic disease of the heart.Its special peculiarity is its early appearance,for it may be seen in children,and almost always in persons under forty years of age;another distinctive sign is its frequency in those of the female sex.Angina pectoris may be the first manifestation of hysteria;it often presents a remarkable obstinacy,and the attacks sometimes recur at very frequent intervals.The attacks is often sudden in its onset and occurs at night,in which respect the affection differs from true angina as usually observed.There are often found at the same time more or less extensive hyperaesthetic zones of the skin, and especially rachialgia.The increase of sensibility of these zones often marks the beginning of an attack,the pain of which reaches its maximum almost immediately. The skin of the precordial region is the seat of a smarting sensation,and the left side is as if compressed in a vice;the pains radiate into the neck and upper extremity,chiefly along the course of the cubital nerve,and sometimes throughout the entire left side of the body. In exceptional cases the pain commences in the little finger to the left side,or in the toes of the left foot, and thence spreads to the trunk.In almost all cases the skin,whatever may have been the mode of onset,is affected with a very distressing hyperaesthesia.In some cases we notice very marked vasomotor troubles,the skin of the face passing through all shades of colour,livid,blue, and red.Sometimes the same phenomenaare manifested in the left arm,or the entire left side becomes cold,and local asphyxia of the fingers is produced.During the height of the attack we often find palpitation,intermittent heart beats,sometimes a scarcely perceptible and very rapid pulse.The respiration is also disturbed,and

we may notice irregularity, dyspnoea, oppression, or complete arrest. Compression of the phrenic nerve at the level of the scaleni is often painful, as is sometimes that of the cervical sympathetic. The attack is accompanied ordinarily by an extremely distressing sense of anxiety, with a tendency to syncope. The severity of the attacks varies considerably; they are sometimes very light and very brief, or they may last for several hours; in the latter case we have to do with attacks in which the paroxysms follow each other so closely that they overlap. According to Rendu, pressure on the hysterogenic zones, a dream, or other slight influences may give rise to the seizures. There are in the region of the abdomen hyperaesthetic and often hysterogenic zones which have the same seat in the two sexes; thus, the hypogastric zones correspond in women to the ovary, and in man to the prolongation of the spermatic cord. These zones - which, though usually unilateral, may be sometimes bilateral - very often extend to the skin of the external genital organs, such as the labia majora or the scrotum. The last-named parts alone may be affected. A very lasting and sometimes alone existing condition is that form of hyperaesthesia of the lower extremity of the coccyx, affecting both skin and the deeper parts, known as coccygodynia. Hysterical persons very frequently suffer from a variety of hyperaesthesias of the mucous membranes. On touching with a speculum the cervix uteri Rosenthal was able to excite hysterical attacks; but it is, however, Lichtwitz who has fully described the hyperaesthesias in question, especially the spasmogenic hyperaesthesias of the mucous membranes, which exist usually in the form of more or less limited zones. He has studied them on the mucous membranes of the nose, the mouth, the velum palati, pharynx, larynx, Eustachian tubes, cornea, conjunctiva, and lachrymal ducts. They are often limited to a very small area, and must be carefully looked for. These mucous zones often correspond to the cutaneous zones; they are sometimes unilateral, sometimes symmetrically situated on the two sides. An interesting fact is noted by Lichtwitz that the points affected with spasmogenic hyperaesthesia are often the seat of anatomical lesions. Contact with the hyperaesthetic mucous membranes excites unexpected reactions during an examination of the larynx, of the ear, or the Eustachian tube, etc., recalling laryngeal vertigo or Ménière's vertigo. The vaginal mucous membrane may be the seat of a hyperaesthesia, contact with which may provoke either local spasm, vaginismus, or generalized attacks. Gilles se la Tourette has noted a spasmogenic hyperaesthesia of the urethra; the anal mucous membrane may also be affected and give rise to local spasms analogous to those provoked by fissure of the anus. Spasmodic attacks may likewise be occasioned by hyperaesthesia of the organs of special sense. It is not uncommon to see hysterical subjects who have attacks following the stimulus afforded by a strong odour; in others the paroxysms are provoked by exposure to bright sunlight, or by a loud noise. Gradenigo believes in the existence of auricular hysterogenic zones, insisting upon the frequency also of otalgia, sometimes reflex,

sometimes associated with auricular lesions,and occasionally accompanied by haemorrhages. So far as hyperaesthesia of the viscera is concerned,we may note that the organs of generation are mainly affected.Piorry, Schutzenberger,Négrier,Romberg have familiarized us with the occurrence of ovarian hyperaesthesia.Briquet mistakenly regarded pain in the ovarian region as a myodynia of the abdominal muscles,to which he gave the name of "coelialgia",and which he regarded as frequent. The ovarian region is often the seat of spontaneous pain,of a sensation of weight,of heat,or of neuralgic radiations.These pains are increased upon the approach of the menstrual periods,especially during walking. Recrudescences of the ovarian pain are also among the precursory symptoms of an attack;the ovary becomes the seat of lancinating pains,and seems to be the point of departure of the globus hystericus.Sometimes the pain is so severe as to prevent or seriously interfere with walking;the patients are doubled up and make pressure on the abdomen in order to quiet the pain.Sometimes a deep pain is accompanied by hyperaesthesia of a small area of the skin corresponding more or less exactly to the ovary;but this superficial painis more or less evanescent,being most marked at the approach of the paroxysms.By burying the fingers,united in the form of a cone,at the level of the anterior superior spine of the ileum,as if we were trying to compress the internal iliac artery,we may reach the point where the pain is most intense.Sometimes by this procedure we may be able to feel the ovary,and in any case we excite characteristic phenomena of pressure on hysterogenic or hysterofrenatic zones,that is to say,that,according to circumstances or to the intensity of the pressure,we may excite the aura or arrest the attack.In general a light pressure causes an ascent of the globus,while progressively increased pressure arrests the attack.The pain which is called ovarian is,in fact,seated in the ovary,at least in some cases;sometimes in pregnant women one can notice the ascent of the painful point during pregnancy, and its rapid descent when such hysterical subjects have been delivered.Hyperaesthesia of the mamma may be accompanied by a swelling of the tissues constituting the gland and surrounding it,and also by cutaneous redness.The deep-seated hyperaesthesia of the breat may play the part of a hysterogenic zone,but more frequently we observe cutaneous or subcutaneous zones around the gland;the lateromammary hysterogenic zones are perhaps the more frequent.The hyperaesthetic conditions described in connection with the ovary and breast may be seen in connection also with the testicle.Testicular hyperaesthesia may be symmetrically located on both sides,but it is more commonly unilateral,and is always more pronounced on the side of the most marked sensory and motor disturbances.Neither section of the cord nor ablation of the testicle causes the pain to disappear; and the fact that the same is noted after removal of the ovary is well-known.In a certain number of cases a pain -ful testicle presents certain malformations,either in volume or in position,or in its relations to the epididymis.Very commonly the spermatic cord is also

painful,and the sensation caused by pressure of the cord passes up into the pelvis,so that the region which corresponds to the ovarian region in woman maymeven in man, be found hyperaesthetic. Under the influence of physical or mental stimuli any of the hyperaesthetic or hysterogenic zones may disappear.Thus,Pitres effected this by inducing local ischaemia by means of Esmarch's bandage.For the purpose of diagnosis it is useful to be able to recognize hyperaesthetic zones,especially those which are hysterogenic,- whose discovery may not only serve to reveal a latent hysteria,but may also enable us to provoke a discharge which sometimes cures or arrests the malady.In a case reported by Pitres,their presence enabled him to recognize the hysterical nature of convulsions occurring in a pregnant woman who was supposed to be suffering from eclampsia,and upon whom it was supposed to induce an abortion.

Motor Stigmata.

The hysterical troubles of motion correspond to those of sensation,and it is of no inconsiderable importance that one should be able to recognize them.The first to be discussed is that of

PARESIS.

As Briquet,Burq,Richer,and others have pointed out, weakness of voluntary movements are extremely frequently to be observed in hysterical persons:to such the name of "amyosthenia" is usually,but improperly,applied.In general this condition of disturbed motitlity is most marked on one side,usually the left,but it may be more limited;nevertheless,when it appears to be limited,it is very often generalized.This paretic condition coincides with various conditions of the tendon reflexes, which may be at least considerably weakened,if not abolished,or normal,or exaggerated.This loss of power had generally a regional correspondence with the anaesthesia,which is also more common on the left side.These disturbances of motility are influenced by a great number of physical and moral agents;the paresis is usually most marked at the time of walking,and is increased in the dark.Under the influence of depressing moral emotions it may become exaggerated,even to complete paralysis.The loss of power of hysterical subjects is characterized not only be diminution of dynamometric pressure, generally most marked on one side,but by the form of dynamographic curves which reproduce the curves of fatigue.In proof of the fact that the paresis is general, and that the aesthesiogenic agent has a general tonic effect, may be mentioned that this form is often found on both sides,even when the paresis might be thought to be unilateral;and when we cause a transfer,by the application of aesthesiogenic agents,on the supposed heathy side,we often note that the first effect is an increase of power on this side,the curve of which resembles the normal form. Hysterical persons also sometimes suffer from diminution of muscular tonicity,or hypotonia,which is manifested by flaccidity of one side of the face.In the case of the ankle especially,this flaccidity of

muscles favour relaxation of the joints,and sprains may be thereby relieved.

CONTRACTURES.

In many hysterical persns there is a tendency to rigidities or contractures,and such may be produced in them by very slight irritations (Brodie),as well as by strong emotions (Duchenne).Charcot denominated this state of predisposition to contracture the "diathesis of contracture",and says that it recalls the reflex hyper-excitability seen in association with organic lesions of the pyramidal tract.This state,Richer affirms,coincides most ffequently with a muscular weakness and therby resembles paralysis;it resembles contracture in that the slightest cause usually suffices to make it appear. In proportion as it is exercised this property increases;and,although it has generally to be sought for,it may appear spontaneously at the moment of making a violent movement.Almost always,on the side of contracture,says Charcot,there is a more or less marked anaesthesia,an ovarian pain,a certain degree of paresis,all relatively benign accidents,but which,as everything leads us to believe,have preceded the appearance of the contracture.The tendency to contracture,which is often exaggerated by hypnotism,may be brought to light by a great number of direct or indirect excitations;and it is not necessary that these be strong,for slight irritations of the skin,even on the more anaesthetic side, may excite contractions.Psychical irritations may also produce them.The most effective means of causing these contractures are,according to Richer: deep massage, repeated taps on the tendons,compression of a nerve,the application of a vibrating tuning-fork,faradization of the muscles or nerves,the application of amagent,or simply touching the skin.This last-named procedure enabled Richer to establish a somnambulic form,which he opposes to the lethargic form obtained by other methods. A strong voluntary contraction of the muscles may also provoke a contracture.The same effect may be obtained by circular compression of a member by a bandage,provided the constriction is strong enough to irritate the muscles without going so far as to produce local anaemia,for then the contracture ceases.When the band which has provoked the contracture is removed,the latter may persist, disappear,or become generalized either in the muscles of the limb,in those of the whole side of the body,or even all over the body.The generalization occurs with especial ease in the regions already affected with anaesthesia or paresis;and the extension of the anaesthesia is always accompanied by extension of the contracture. Richer has noted that in the contractured members there is always an exaggeration of the tendon reflexes,and sometimes an epileptoid tremor.The condition of contracture does not involve a maximum shortening of the muscle,and the limb may retain the position which it had before the contracture appeared.The affected muscles have preserved their electrical excitability,but the effects of electrical stimulation undergo interesting modifications: we may notice an extension of the electrical stimulation under the influence of rapid excitations,and an increase of shocks produced by slow ones;

in addition there is a sort of abnormal contraction of the muscle characterized by a prolongation of the descent,which sometimes may be so incomplete that the electrical contraction is followed by a permanent contracture.Under the influence of repeated electrical stimuli,the contracture may invade the entire member. The same tendency to contracture as in the voluntary muscles may be manifested in spasms of the neck of the bladder,as well as in the oesophagus.Preceding the contracture,and remaining after its disappearance,may be witnessed anaesthesia and paresis,which appear to be closely related to it.This tendency persists,although undergoing variations in intensity,and explains the frequency of a return in the contractures,- so long as the diminution in sensibility and motility has not disappeared,and so long as the tendency to contracture exists. Contractures should be properly treated as soon as observed,for the reason that when of long-standing they are very obstinate,and apt to resist treatment for years. They are,especially when recent,often influenced for good by massage or moderate compression,or by the application of the magnet,which may cause them to disappear with striking rapidity

OCULAR TROUBLES.

The sensibility of the eye,we have seen,may be affected in hysteria,as is also the sensibility of its coverings.It is,furthermore,the organ in which are best shown the relations which exist between the troubles of sensibility and those of motility.In discussing the implication of the sensation of movement,Borel has shown that,if we try to make the eye of an hysterical subject follow the movements of the axis of a cylinder, the patient has no idea of the direction in which his eye looks;the loss of the muscular sense may then be as complete for the muscles of the eyes as for that of the extremities.This loss cannot be without influence upon the functions of the ciliary muscle.According to Parinaud,Brücke's muscle - the longitudinal portion of the ciliary - is the one most frequently affected in hysteria;its contracture is always found when that of the orbicularis exists,but it may also occur alone.The contracture of the muscles of accomodation produces a sort of myopia which is marked by the circumstance that,because of the fixity of attitude,the eye can see objects clearly at one distance only.It is this contracture which plays the principal part in the myopia of nervous children,and in the troubles of accomodation to which traumatism and certain diseases give rise.It is also of importance in the production of monocular polyopia,of micropsia,and of macropsia;it is seen especially in hysterical subjects who are predisposed to contractures of other muscles of the body;but it may also present itself as the predominating,if not the only,contracture. Blepharospasm is perhaps the most frequent among the contractures of the extrinsic muscles of the eye.It may be present under the clonic or the tonic form,or,according to Parinaud,as a pseudoparalytic ptosis.The clonic form is the most common;it is shown by a continual

winking,which is usually bilateral;it may occur in attacks,or be a permanent condition;it may constitute the chief element of the morbid condition,or it may coincide with other conditions of trouble.Gilles de la Tourette says that it is a distinctive characteristic of these attacks and of hypnotic lethargy;and it is sometimes seen during the attacks of sleeping.The blepharospasm may be provoked by a slight irritation of the conjunctiva,such as that resulting from the presence of a foreign body,a mild inflammation,etc.;and,like all the other spasms,it may follow a convulsive attack.It may also come on apparently spontaneously.Pressure on certain points,perhaps at a distance,may increase or arrest it.The condition may be painful or painles,and these two forms of the tonic affection differ in intensity rather than incharacter.When painful it is usually bilateral,although more marked on one side;it is often accompanied by photophobia and lachrymation;it is often very difficult to overcome,and the more so as it often coincides with hyperaesthesia of the preorbital region anf the eyelids.Painless blepharospasm is frequently unilateral;the forced closing of the eyelids is less energetic,and is not accompanied with either lachrymation or photophobia.There is usually depression of the eyebrow on the same side in blepharospasm.This characteristic is wanting in pseudoparalytic ptosis of Parinaud,which consists in a simple falling of the upper lid,without any sign of a forced contraction.This ptosis has really nothing to do with spasm,and belongs rather to the ptosis of the nocturnal paralysis of Weir Mitchell,in which it is necessary to throw the head backwards in order to be able to see through the palpebral slit.This ptosis often coincides with other pareses of the same side.Finally,we may note the fact that it is not always easy to distinguish between the effects of paralysis of the levator palpebrae and those of contracture of the orbicularis muscle.Again,it is not at all easy sometimes to distinguish ocular paralyses from spasms,and,indeed,paralysis of the upper lid may exist at the same time with facial paralysis in hysterical hemiplegia.Hysterical ptosis,as an isolated symptom,has been seen but rarely,and its existence is doubtful.A paralytic conjugate deviation has,however, been observed.In a case reported by Parinaud,there was, coincidently with a paralytic ptosis,a paralysis of accomodation,with excessive dilatation of the pupil and a partial paralysis of the internal and inferior recti; but the paralysis of the motor oculi muscle would appear to be very rare in hysteria.Mydriasis and myosis seldom occur independently of other symptoms;and this absence of mydriasis is the rule in hysterical ophthalmoplegia, which,furthermore,is never internal or total,but remains external.Giraud-Toulon says he has seen a case of spasmodic mydriasis.Borel thinks paralysis and spasm of the sixth pair to be exceedingly rare;and the same appears to be true with regard to total paralysis,ophthalmoplegia characterized by complete immobility of the eye.In a case reported by Bristowe,there was double ptosis with almost complete immobility of the eyeballs, without midriasis.Finally,with further regard to

blepharospasm,we may note that,when very marked,it is often accompanied by spasms of the ocular motor muscles, and that it may give rise to a diplopia.It is also accompanied by sensory troubles of the eye,including all forms of visual anaesthesia,and also by disturbances of cutaneous sensibility under the form of systematic anaesthesia,and hyperaesthetic zones.In many cases the blepharospasm disappears under the influence of a more or less direct psychical treatment;and,as a rule,it is less the local trouble than the general condition that ought to receive attention with a view to cure.I have already remarked that blepharospasm is sometimes accompanied by spasms of the motor muscles of the eye,but the latter may also,though rarely,be alone affected.Hysterical squint has long been recognixed,and is now regarded as a regular symptom;and is sometimes seen in association with spasmodic conjugate deviation and spasm of the associated muscles.Although all the muscles appear to be affected,it is usually encountered in the form of convergent strabismus.

TREMOR.

This is the last of the hysterical motor stigmata that need be considered in detail.It may be limited to one side of the body,present itself in a paraplegic form,or be generalized.It is rather infrequent as compared with other motor troubles,and is,according to Charcot,rather more common in men than in women;it may also beobserved in children.The subjects of hysteria have also occasionally other forms of twitching resembling those seen in epilepsy;among them especially nystagmus,an affection which is common to the two conditions.Ch.Lepois recognized tremor as a precursor of paralysis;and the history of miraculous cures comprises some cases of tremor which he regarded as really minute convulsions.The manifestation of tremor are somewhat varied.As a rule,it appears suddenly as a result of some physical or moral shock,but still more frequently,according to Dutil,it follows a convulsive attack.The tremor,like the paralysis or contracture,is subject to periods of exaggeration and remission.Its duration varies greatly;it may persist for months without intermission,or its course may be very ephemeral. It is no less variable as regards intensity;sometimes hardly appreciable,it may in other cases be of sufficient intensity to impede the various functions.The rapidity of the oscillations also varies considerably; sometimes they are remarkably slow,at other times very rapid.Occasionally the tremor manifests itself only upon the inception of voluntary movements.Most commonly it persists during repose,but is more or less increased in frequency and amplitude by active movements, and by various external conditions.The tremor not only varies in different individuals,but may also be variable in the same individual;it is what Dutil calls a polymorphous tremor.Intentional tremor mimics that of multiple sclerosis and mercurial tremor,which latter is,in the opinion of Letulle,often of an hysterical character.The slow non-intentional tremor,with four or

five oscillations per second, resembles the tremor of paralysis agitans or senile tremor; the rapid non-intentional form recalls the tremor of exophthalmic goitre, of alcoholism, or of general paralysis. Frequently a marked convulsive and ephemeral phenomenon is vibratory tremor with rapid oscillations, eight or nine per second; it may become a chronic condition. The patient is agitated by a perpetual tremulation; the muscles of the extremities and of the trunk are animated with fibrillary contractions; the face and tongue may participate in the tremor when it is very intense, and the fingers are subject to sudden twitchings. This tremor ceases only during sleep. The disturbances of enunciation, the troublesome movements of the lips, and the tremblings of the hands recall the features of general paralysis. When the tremor is very pronounced in the lower extremities, it may simulate epileptoid trepidation, especially when the reflexes are exaggerated. Following attacks of this tremor may become exaggerated, and may be accompanied by a loss of power in the lower extremities. This weakness of the lower limbs may be seen in Graves' disease, in the lumbar crises of locomotor ataxia, and in general paralysis; such associations show very clearly the paralytic nature of the tremor, though they may add to the difficulty in diagnosis. Dutil has pointed out that the most frequent tremors are those of moderate rhythm, intermediate, as regards the number of oscillations, between the vibratory and the slow tremors. They vary in extent, and in the modifications which they undergo during repose. We may distinguish among them an intentional remittent type, resembling mercurial tremor and that of multiple sclerosis; with this difference, however, that instead of becoming manifest only upon the inception of voluntary movements, it is permanent, but is exaggerated in intensity when the patient attempts to execute any movement whatever. It is a tremor generalized throughout the extremities, the trunk, and the head, even the tongue. The fingers, however, are, as a rule, affected only by transmitted movements and have no tremor in themselves; the other segments of the limbs are agitated by alternating movements of flexion and extension, which become exaggerated when the patient begins to walk or to execute any voluntary movement whatever. Sometimes a paraplegic character is assumed by the intentional tremor, though it may be manifested chiefly on one side only, or be strictly hemiplegic. When it is confined to the lower extremities it simulates the trepidation of spasmodic paraplegia; but the parellar tendon reflex is not exaggerated, and sometimes it is even weakened, and, as in spasmodic paraplegia, the tremor, instead of being increased, will be arrested by a sudden flexion of the foot. There is alongside of this remittent intentional tremor a pure intentional tremor, of the same moderate rhythm, which is manifested only on the occasion of voluntary movement, and which resembles very completely the trembling of multiple sclerosis. The speech, instead of being scanning, has the characters of hysterical stammering. But the study of the associated

symptoms should be made with care, for hysteria may simulate many symptoms of sclerose en plaques, and, furthermore, the two affections may coexist. The variability of the hysterical symptoms may be of great assistance in the diagnosis, but the existence of this affection has passed unrecognized, under such circumstances, by numerous competent observers.

Nutritional Stigmata.

The functions of digestion, secretion, circulation, and respiration are not performed in hysterical persons so well as in those who are not so afflicted. Many of them have loss of appetite and insomnia, but, in spite of this, are not emaciated, and appear to be as active as usual. Certain cases of hysterical anuria, in which urea has been found in the vomited matters, are instances in point. From his observations of hysterical subjects suffering from digestive disturbances, Empereur concludes from an examination of the excreta that, in general, in hysteria the nutritive processes are retarded, and that assimilation does not occur, because dissimilation does not take place. He admits, however, that, in certain hysterics who present no morbid symptoms nor permanent stigmata, there are no disorders of nutrition. The volume of the urine, and the amount of urinary excreta in proportion to the weight of the individual being exactly the same as in healthy persons, Gilles se la Tourette and Cathelineau conclude, after much patient research, that in hysterical subjects, apart from pathological manifestations of the neurosis other than permanent stigmata, the nutrition is effected normally. Of all the older writers who studied the condition of the blood in hysteria, Briquet says that Ettmuller is the only one who held that it was thick, all the others stating that there is a diminution in the solid elements. Gilles de la Tourette and Cathélineau found that cutaneous incision in an hysterical subject would give issue to an amount of blood one-third less than a similar incision would give issue in an healthy person, and that the quantity of haemoglobin, of urea, and of glucose is normal - apart, of course from the presence of anaemic and chlorosis. On the other hand, however, Quinquad concluded, as a result of his investigations that, except the subject happened to be chlorotic, the condition of the blood, in hysteria, undergoes no alteration. Some claim to have observed a small amount of oxyhaemoglobin in the blood, just as one finds in other neuroses. For the purpose of studying the time necessary for the reduction of oxyhaemoglobin in the tissues Hénocque has devised a special procedure. In hysterical subjects the reduction is longer on the anaesthetic side; and, under the influence of peripheral stimulations, or of emotions, this reduction would seem to undergo important variations.

Mental Stigmata.

Simulation.- For a very long time it has been held that hysterical persons are given to simulation as an actual pleasure, and to deceive for the satisfaction to be derived from notorietyTo a very slight extent this may be true, but forthe most part it is false, this time-honoured hypothesis being due to an inadequate knowledge of the disease. As a matter of fact, hysterical subjects express false judgments because they perceive incorrectly, and consequently reason wrongly. A study of the general and special sensibility in thse patients explains well the genesis of their errors. In reality it is the man who is the measure ofall, and hysteriais a measure which is not only false, but essentially variable, and under the influence of surrounding conditions, and even of conditions created by sensations. The disorders of sensation are quite capable of giving rise to errors of judgment concerning the actual surroundings. But it is not only false perceptions during the waking hours which disturb the ideation; the recollection and the association of dreams may still further complicate the situation. The sleep, often insufficient, of hysterical subjects, is ordinarily troubled by dreams - of a nature to provoke sadness or fright. Now, it often happens that these dreams remain in the memory during the waking hours, and fix themselves in the imagination with such an intensity that the patient is incapable of distinguishing the reality. Furthermore, we know that these representations cannot exist without the coincidence of somatic conditions which necessarily accompany the actual sensation; that is to say, that corresponding to these very intense representations there are characteristic somatic states which may consist in anaesthesias, paralyses, contractures, or disorders of nutrition of the most varied kind. Such is the pathogenesis of the suggestive phenomena which may arise - either from external stimuli or from dreams or waking delusions. There is no question that the rôle of the imagination is considerable in the pathogenesis of traumatic hysteria; but to hold that the imagination is the only active factor is to exceed the limits of probability, for we cannot hold that shock itself is powerless to do what may be done by the mere representation of shock. In many casesthe imagination merely accentuates the effects of shock: it completes them. Post-paroxysmal delirium, external irritation, or even a simple suggestion may reproduce what is done by a dream. Dreams, especially erotic dreams, which may be accompanied by physical phenomena, play an important part in the false accusations brought by hysterical patients. Hysterical persons can with difficulty establish the difference between actual sensations, the representations of a dream, and the suggestions to which they have become subjected; as a rule, they have an extraordinary credulity, which accords well with their loss of sensibility and the weakening of their powers of discernment.

Aboulia.- By this term is meant the absence of will-power, the diminution of which keeps pace with the increase of reflex irritability. Such hysterical persons are subject to irresistible impulses, which have the peculiarity of being easily exhausted. It is this which has led observers to attribute the quality of simulation to many of their acts, for example, to the attempts at suicide which, however, succeed occasionally. Furthermore the impairment of the will renders them, by reducing their powers of mental concentration and attention, vacillating, impulsive, and lacking in determination. So prominent may this condition be, that they hesitate at the slightest obstacle, and cannot bring themselves to perform the simplest task, such as drssing and undressing and the necessary attention to the toilet.

Impressionability.- This is really a mental stigma, for suggestibility is often strikingly developed in hysterical subjects. They are subject to the slightest influence, sensitive to insignificant impressions, emotional, and easily swayed. The lack of will-power renders them of infirm and vacillating judgment, so that they often become dependent upon others to decide their slightest actions. Their irritability renders them insupportable, and serves as a basis for their impulses, and their suggestibility gives them the appearance of inveterate liars; it is also this weakening of the nervous functions which gives to their character its general tone of sadness. The latter, which is more marked in men, a great number of whom have made, or premeditated, attempts at suicide, is increased under the influence of all the physical and moral conditions which are capable of causing a depression of the nervous system.

Impairment or Loss of Memory.- It is very largely on account of their amnesia or forgetfulness that hysterical subjects appear deceitful. In certain cases the loss of memory embraces a certain group of related facts pertaining to some person or event, while other contemporaneous incidents are recalled. In the same way a group of of motor images may disappear systematically (such as, for instance, those for walking or writing or for articulate speech), and astasia, agraphia, and motor aphasia result. In the same way the recollection of a certain person may completely drop out of their minds, or they may lose all the words of an acquired language. In other cases the loss of memory, instead of being systematized, may be localized; that is to say, it embraces a given period of time. Frequently after a convulsive attack, sometimes in traumatic cases after the initial accident, there is a loss of memory for a variable period of time antecedent to the incident in question, or for a period both before and after the mental disturbance. There is blurring of recent impressions in all cases of hysteria. Rare instances are recorded in which the amnesia has been total and complete for all acquisitions up to or during a certain period of life. Such patients begin again to speak and learn as children. In some cases acts and impressions are are forgotten immediately. Thus, a story in a book, though enjoyed to the full at the time, may not be remembered in a single detail afterwards.

ACCIDENTS OF HYSTERIA.

As has been already remarked these are the more or less transitory features of hysteria, and chief among them are the convulsive or hysterical attacks. These may be seen at all ages; they are observed in nearly three-fourths of the female patients, but in the case of men these proportions are reversed. Although the hysterical convulsive attacks are much more rare in patients of the male sex, they are, nevertheless, often much more grave in them. In children such seizures are ordinarily abortive, but they become more complete as age advances. The convulsive rages of children have been attributed by Chaumier to hysteria, but they are at least as commonly preludes of epilepsy, and we are the less able to make a differential diagnosis, for the reason that hysterical stigmata are, as a rule, wanting in childhood. Though the attacks are sometimes observed in old age, the tendency to them grows less after the age of forty years. When the attack is the first symptom of hysteria it is usually manifested as the result of some moral or physical shock, a dream, acute alcoholism, or other acute intoxication, hypnotism, or ether or chloroform narcosis. As there is always doubt concerning the preëxistence of stigmata, it is somewhat difficult to decide whether the convulsive attacks really do constitute the first manifestations of hysteria. The menstrual epoch is favourable to the production of attacks, chiefly, however, when there is disorder of the uterine functions. The first attack, in persons already showing stigmata, may be provoked by the most trivial causes; nevertheless, it often appears under circumstances of general weakening, as by acute disease, fatigue, or worry. Whatever may be the conditions under which the first attack is produced, when once the system is primed, the explosion may take place under the most trivial cause operating; hence the rule to prescribe quiet and isolation. Those patients who have attacks less frequently often have them more severely, as we see in the case of men: yet this is not a general rule. That which is more constant is that, in the same subject, the attacks are stereotyped, presenting themselves always under the same form. The attacks of hysterical convulsions are almost always diurnal; even when they are provoked by a dream, the discharge takes place in the morning. Sometimes the attacks recur constantly at the same hour, especially when we have to do with collective manifestations, or those which take place under the influence of some external circumstance that is regularly repeated.

PRODROMATA.

In the majority of cases the symptoms of hysteria develop themselves so gradually, that it is difficult to predict a definite result; though the attack may have a sudden onset with loss of consciousness, it is usually preceded by premonitory trouble, often constituting a true aura, and repeated, as a rule, in the same subject,

with a remarkable uniformity. The premonitory signs of an attack are mediate or immediate, they indicate a danger which is more or less distant, or one which is urgent. The first are modifications of character, the patients becoming irritable, presenting alternations of excitement and depression, approaching, especially in man, to a condition of apathetic moroseness. This state, which is often accompanied by perversions of taste and of appetite, may last for a few hours or several days, and while it lasts sleep is generally disturbed, and dreams are troublesome. During this period the patients may, in a certain measure, struggle against the attacks and retard its appearance. Just as in epilepsy, moreover, this prodromal period may be short, and the attack does not then appear. The patient prefers to have a convulsion rather than to fight against it, and he looks for the most convenient place to suffer the ordeal; in fact, there is hardly any opportunity for a struggle on the part of the patient against the immediate premonitory phenomena, his will being powerless and resistance occasioning him no inconsiderable distress. Though all the hyperaesthesic and hysterogenic zones show an increase in their morbib sensibility, there can be no question that an exaggeration of the ovarian or testicular pain is the most frequent of the immediate premonitory phenomena. Whatever may be the location of the zone, the sensibility of which is exaggerated, provided that it is subepigastric, a globus starts from it, mounting towards the pit of the stomach, and then to the throat. Sometimes this sensation of the hysterical globus is accompanied by vasomotor phenomena, such as redness of the face, local anaemia of the extremities, with a paretic state, and a sense of formication. It is also associated with a feeling of oppression, of constriction of the pharynx, then pulsations appear in the temples, ringing and whistlings in the ears, especially on the side most affected by the stigmata, and the attack breaks out.

HYSTERICAL CONVULSIVE ATTACK.

Classification.- We are indebted to Charcot for the first systematized attempt to classify the convulsive manifestations of hysteria, and to Paul Richer for having figured them afterwards. The former showed that the phenomena of the disease so not defy description and classification, and that all varieties of convulsions may be brought together under one type.

THE GRAND ATTACK.

It is not a very common thing to meet with complete grand attacks, but in some irregular or fractional they occur in the vast majority of all cases of hysteria. The attacks may come on spontaneously, or be occasioned by emotional disturbances. Patients possessing spasmogenic zones may usually be thrown into a convulsion by firm pressure on these points, and during the seizures similar pressure again commonly causes it to subside. The grand attack consists of a prodromal stage, followed by four periods.

The Prodromal Stage.

This has already been described above.

The Epileptoid Period.

The epileptoid period imitates the manifestations of an epileptic attack;and,whatever have been the prodromata,the attack of the "grande hystérie" of Charcot,hystero-epilepsy,commences with it.The patient sinks down or falls over,without crying out,but sometimes makes an audible hoarse noise in the pharynx,produced by a sudden inspiration.The loss of consciousness is complete,sensation is abolished,even though it may have been exalted during the prodromal stage.Of this phase there is no recollection.The tonic convulsions which begin immediately may be general,but they are most marked usually on the side on which the stigmata have predominated.The face is pale,the neck stiffens,the head is thrown back,the throat becomes swollen,the shoulders are elevated,and there is congestion of the head.The eyebrows are elevated,the eyes are convulsed, looking obliquely upwards,the mouth is opened,and the tongue is often projected forwards or laterally;the teeth are rarely closed,and it is altogether exceptional for the tongue to be bitten.The glottis closes after inspiration,and the chest and abdomen remain swollen, the neck is also tumified,and from time to time there are brusk respiratory movements.The swelling of the neck coincides with a congestion of the surface and a turgescence of the subcutaneous veins,which may be seen standing out under the skin.All these phenomena are necessarily transient,as are also the respiratory spasms by which they are occasioned.There are to be seen in the upper extremities slow movements of circumduction;the fingers are flexed over the thumb,the wrists are flexed in pronation,the arms are raised,and the elbows are flexed,bringing the hands before the face;then the members are extended again along the body,the fists being in forced pronation.The trunk becomes twisted,and is alternately flexed and extended.The lower extremities also execute alternate movements of flexion,extension, and rotation.These movements,which are,as a rule,very slow,last but a short time,and are followed by a general tonic spasm.The extensions of the head become exaggerated,the swelling of the neck increases still more, and the face is puffed out and cyanosed.The upper extremities are extended in adduction and rotation outwards, the wrist being flexed,the fist tightly closed.The lower extremities are extended,and the feet are in the position of equinus,turned inwards or outwards.The trunk is fixed,often in opisthotonos;sometimes the body, strongly curved backwards,rests only on the heels and the sinciput,forming the arc of a circle.Sometimes during the epileptoid period of the attack,the limbs may assume the position of the so-called crucifixion attitude;from which it follows that the above description does not correspond strictly to the facts in every case. This tonic phase is soon succeeded by a clonic phase, the convulsions of which usually begin in the part of the body which was the first to suffer from the tetanic

phenomena.The face makes grimaces,the head and the limbs become animated with rapid oscillations,the respiration is resumed,but is whistling and staccato;the abdomen has independent and irregular movements of its own,and one sometimes hears the noise made by flatus in the bowels,as well as the noisy movements of swallowing. All the clonic movements are independent and illogical. This phase may last several minutes and gradually subside,the patient falling into the stage of resolution of the muscles,characterized by complete resolution of all the muscles;the patient lies sunken down in dorsal decubitus,the head lies on one shoulder,the face is swollen,the eyelids are trembling,and the respiration is stertorous.Sometimes resolution is incomplete,and contracture occurs in a limbmor in the entire half of the body:sleep,as a rule,causes this contracture to disappear.Most suthors affirm that,on the average,the duration of the epileptoid period is about sixty seconds for the two tonic and clonic stages:still,there are very important variations from thisBefore the onset of the convulsion,without any trace of a tonic contraction,one often observes a very active pupillary contraction,constituting a sort of masked epileptoid stage,and showing that the attacks may be more incomplete in appearance than in reality.In fact,the condition of the pupil forms an interesting subject for study.During the attack it is but slightly influenced by the action of light,which sometimes,however,indicates a very marked contraction.When the face begins to be set by the tonic contraction preceding the torsion of the head,the pupil contracts rapidly and then remains immobile. During all the first part of this first phase,during the tonic period,the pupil remains contracted.As soon as the clonic movements begin,the puil becomes strongly dilated,and during the second part of the epileptoid, and throughout the entire stage of strong convulsions, a persistence of the pupillary dilatation is observed. Finally,it should be noted that the length of the epileptoid period may be increased or modified by the absence of one of the stages.

The Period of Clownism.

This developes after the period of resolution has lasted a short time.It is made up of two phases, a phase of contortions,or illogical attitudes;and a phase of extensive movements.In the first phase the contortions of illogical attitudes present the most bizarre characters,but there are several which occur with considerable frequency and have received a special description,such as,for example,the "arc de cercle" (arc of a circle),which may be anterior,posterior,or lateral.Opisthotonos,or the anterior arc of a circle,is the most common;the patient rests upon his head and heels,the upper extremities being extended alongside of the body,or else thrown up each side of the head.The abdomen projects strongly upwards,often having movements resembling thase of cynic spasm,and which the older writers wrongly interpreted as indicating sexual excitement.The arc of the circle may be maintained for ten or

fifteen minutes,but more frequently it is a transitory attitude.Usually the jaws are closed,the face fixed, and it may happen that it is accompanied by contractures.Sometimes the head is thrown so far back that the face rests on the ground;sometimes the feet are so sharply extended that the toes rest upon the ground.In order to form the posterior arc,the back rests upon the ground,the lower extremities are raised,and the trunk is curved in the position of emprosthotonos.At other times the curve is a pleurosthotonos - it is lateral arch. These attitudes are maintained for a variable length of time,and with such force that the observer may rest his entire weight on the patient's body or limbs without moving them at all,unless he happen to press upon an hysterogenic zone.With the relaxation of the muscles and the return of the patient to dorsal decubitus the stage of extensive movements begins.These are characterized by their variety and extreme violenceThe patients utter violent outcries,and,in evident fear or rage,tear their garments,grimace in an horrible manner,and put forth an astonishing amount of strength against those trying to control them.The latter are in great danger of receiving ugly bites,scratches,or blows.

Period of Passional Attitudes.

This period of emotional attitudes is the gradual outcome of the second:its continuation.This stage of the symptom complex constitutes a sort of dream in action.This dream,which the patients do not always reveal,has generally a connection with the circumstances that have provoked the first hysterical paroxysm,such as a rape,or attempt at murder.The knowledge of the dream enables us to interpret easily the passionate attitudes - sometimes possessed of a special character from the hallucinations of animals,etc. - which mayn express the most varied sentiments.At the commencement of this stagethe urgency of the symptoms has now ceased,although the representations in the patient's mind still remain vivid;the voice and the gesture indicate anger or the greatest gayety,ormore commonly,sadness. We may recognize the existence of hallucinations by the attitudes which the patient assumes,as we see him listening attentively or seizing imaginary objects. Sometimes we see very remarkable oscillations of the pupil,alternations of dilatation and contraction which may vary with the attitude of the patient,and seem due to the necessity of modifying the accomodation according to the varying distance of objects or the persons which figure in his imagination.

The Period of Delirium.

This is a prolongation of the dream state of t the third period.It is generally characterized by a sad delirium which is based upon the representations of the preceding stage.The ordinary state of sensibility of the subject may have an influence upon the representations of this delirium.Charcot has noted,for example, that according as the anaesthesia is on the left or right side of the body,the animals which figure in the

delusions pass from left to right,or from right to left. Achromatopsia,if it exists,is shown in the hallucinations;red being the colour the perception of which persists longest,it is the red which figures most prominently and frequently in the hallucinations.But external conditions are not without influence on the delirium; this influence of surroundings,being frequently found in alcoholism,is not peculiar to hysteria.Mosnet has observed that contact with certain objects,or variations in light,may cause it to be increased.This influence of external stimuli has been specially studied by Guinon and Woltke,who,as the result of a series of experiments,conclude that in the delirium of the passional stage of an hysterical attack,we may modify the course of the hallucinations,and create new ones by means of diverse,but always simple,excitations of the organs of special sense,and that the hallucinations are invariably independent of the will of the operator and remain exclusively in the initiative of the patient, who appropriates the sensation perceived,and transforms it as he will into a hallucination corresponding to his habits,his manner of living,his recollections,or,in a word,to his own personality.There is considerable variability in the duration of the delirious period;like other stages,it may be of relatively long duration;but sometimes it even occurs alone.

Duration of the Grand Attack.

Though variable,the duration of the grand attack usually averages from fifteen minutes to hald an hour.The prodromal stage and the fourth period may be very long.The epileptoid period rarely exceeds three minutes;the second period ordinarily lasts five to ten minutes;the third is still longer.In some instances one attack follows another without appreciable interval, or some features of the attack,as the stupor of the first period or the delirium of the fourth,may be prolonged for hours or days,constituting a "status hystericus".

Condition of the Patient after the Attack.

The normal condition is not at once regained after the hsterical patient comes out of the period of delirium.A short time after the attack has ceased it is common,or practically invariable,to observe an abundant discharge of clear urine.Patients may suffer from more or less severe fatigue,but seldom from any mental dulness such as is so common after an attack of epilepsy. Sometimes they even experience a feeling of very manifest euphoria,having a sensation of relief;as a rule, they can rise without assistance,and return to their ordinary avocations.During the attack total anaesthesia is the rule,and sometimes this anaesthesia disappears, leaving only the troubles constituting the permanet stigmata,as soon as the delirium has ceased.More frequently,perhaps,there remain traces of the anaesthesia of the attack,and it is not rare to see a more or less complete,and more or less lasting,deafness or amblyopia reamin after the convulsions have ceased.At other times

we see remaining a contracture or a paralysis,to which are generally added disorders of sensibility

Recognition of the Attack.

When characteristic the attack of hystero-epilepsy can scarcely be mistaken for anything else; but when incomplete the diagnosis is sometimes a matter of considerable difficulty.In some cases,indeed,we are under the necessity of reseving our diagnsosi,at least for a time.The emotional phenomena of the onset,which may remain the only ones,may be confounded with the anxieties and the phobias of the neurasthenic,and of the degenerate.It is especially difficult to differentiate the spasms of the epileptoid stage from those of true epilepsy.In a typical case the diagnosis is easy;as when,for example,the attack comes on during the night or in the morning,when the fall is sudden or is accompanied with a cry,when the patient bites his tongue and urinates in his clothing,when he loses consciousness, and when he remains stupid and greatly fatigued after an attack;but there is no one of these characteristic symptoms which may not be absent.We may base our diagnosis on the course of the affection,and especially upon the existence of permanet stigmata;but hysterica stigmata may be in part wanting,and epileptics also often present permanent disorders,especially of sensibility,which may lead us into error.A pathognomonic characteristic in the urine has been believed by Gilles de la Tourette.It is affirmed that hysterical polyuria is relative and not actual,that is to say,that the total amount of the urine passed in the twenty-four hours during which the attack occured is not increased,indeed, it is rather diminished.The increased quantity is noted only during the first micturition following the attack, and it is only at this time also that the lowered specific gravity and the faint odour and colour are noticed. But the most interesting facts are those related to chemical analysis.It is asserted that the convulsive attack reduces,on the average by one-third,the weight of the fixed residue.The amount of urea is said to be diminished in the total quantity of urine passed,but especially in that voided after an attack.The total amount of phosphoric acid is also reduced from 2.19 gm.,the normal,to 1.24;and,instead of the normal proportion of 25.04 per cent.of earthy acids,we find 80.The amount of earthy acids is,in the normal condition,to that of alkaline acids,as one to three,but this proortion tends to become as one to one during the attack.The amount of chlorides and sulphates is said also to be constantly reduced.These changes in the urine are found even when the alimentation has been in no wise modified on the day of the attack.These characteristics are of the greater value since Gilles de la Tourette and Cathelineau found them in the larval or or abnormal forms of hysteria,and since they differ markedly from the condition found in cases of epilepsy;in the epileptic attack the urine shows an increase in the amount of fixed residue,of urea and of phosphates,but the relative proportions of the two latter,according to Lepine,Jacquin, and Mairet,remain normal.The question,however,is not to

known whether these modifications actually exist in the convulsive stages of hysteria, or whether they exist frequently at these times, but whether they are characteristic. It is certain that the diminution of the excreta and the inversion of the formula of the phosphates is encountered in the convulsive period of hysteria, but these changes are not constant, and they do not belong exclusively to hysteria. What appeared to be the most characteristic in the formula of Gilles de la Tourette and Cathelineau was the inversion of the formula of the phosphates. Some observers are satisfied with these researches, but Voulgres has found the inversion of the formula of the phosphates in locomotor ataxia, phosphatic diabetes, and epileptic convulsions. After a careful consideration of these facts. Gilles de la Tourette says that the inversion of the formula of the phosphates is not in itself characteristic of the convulsive period of hysteria, but that there is also an increase in the chlor-ides. But this increase does not belong exclusively to hysteria, and may also be wanting. Royer also remarks that the diminution of urea is far from being constant. Gilles de la Tourette has objected to these last-mentioned observations that they were made on insane hysterics, but it appears that he was misinformed as to this. However, to prove that the urinary formula in question exists most frequently is not to prove that it is a pathognomonic sign, the character of which is not alone to be frequent, but to be at once necessary and exclusive. Furthermore, not only may this urinary formula be found in other affections than hysteria, especially in epilepsy, but it is also subject to variations in the same hysterical sunject. Poels has found the formula of the inversion of the phosphates in hysterical subjects at other periods than during the attacks. Gilles de la Tourette admits that here, as elsewhere, we may meet with exceptions, but he has made a new series of analyses in a large number of cases, and has been able to confirm the results obtained in the former series. The toxicity of the urine is said to be more feeble than usual during the paroxysmal period of hysteria; but the same may be noted in cases of epilepsy. It is therefore no reliable guide to the recognition of the disease under consideration.

MODIFIED OR PARTIAL ATTACKS.

That form of hysteria which I have described above - the grand attack - may be infinitely modified. The following are some of the most commonly encountered modifications of hysteria constituting the irregular or larval forms:

The Prodromal Stage.

This period of the disease may exist alone, and initself constitute the entire attack, being characterized by perversions of appetite or even complete anorexia, and the desire for solitude, variable emotivity, and so on. On the other hand, this period may be absent, the aura appearing suddenly as a sensation of oppression; or sometimes the attack is accompanied by suffocation, by pains simulating angina pectoris or asthma, by ringing or whistling in the ears, or by a feeling of dizziness

resemblingMénière's vertigo.At other times,again,the aura is represented by an increase of the pains in one or several hyperaesthetic zones,constituting neuralgic attacks of variable seat.All idea of simulation is dispelled when we see these forms of painful hysteria, accompanied sometimes with vasomotor troubles.In certain cases the loss of consciousness developes as the intitial phenomenon,the aura not appearing.There are syncopal and vertiginous attacks,which so closely resemble homologous attacks of epilepsy as to be mistaken for them; their true nature may be recognized by other signs,and especially by the absence of the apathy coming on after the attack.

The Epileptoid Period.

This may even constitute the entire attack,but is sometimes absent in the monor forms of hysteria.Often thespasm occurs alone without any loss of consciousness. The attacks of spasm,preceded by a condition of malaise with depression of spirits,consist in rigidity accompanied by immobilization of the chest,with a sensation of anxiety and suffocation,and deglutition is generally impossible.When the sensation of suffocation arrives at its height,the limbs move convulsively.Then follow headache,sobs,and tears,the attack terminating with a feeling of fatigue,which is succeeded usually by a sense of extreme well-being.This agreeable sense of relief may be wanting,and the crises may recur in the form of a series,or there may a permanent condition of malaise. The crises of suffocating spasm may sometimes be accompanied by urgent danger;in a case of this sort,reported by Muselier,it was necessary to perform tracheotomy, and to leave the canula in position for two months. Death has even been known to occur mainly in consequence of these dangerous spasms.The epileptoid hysterical crises may assume the facial,brachial,or crural types, or that of partial epilepsy from cerebral lesion.The typical epileptoid stage of an attack of hystero-epilepsy may occur as the sole manifestation of hysteria minor,or sometimes there is a series of epileptoid spasms separated by variable intervals,and these may, like hysteria major,recur daily for months.At other t times,these epileptoid attacks recur in rapid succession,without normal intervals,as a"status hystericus" - the "état de mal" of Charcot and Bourneville - which may be distinguished from the status epilepticus, especially when the convulsions are limited to one side, only by the absence of fever.The absence of tongue-biting,and of involuntary evacuations,is not exclusively characteristic of the hysterical condition.

Loss of Memory.

It is many years since Bordie described the occurrrnce of amnesia in consequence of shock.The fact of the border-line between hysteria and epilepsy not being very distinctly drawn is not to be wondered at, since the characteristics of all neuroses are at the bottom ill defined;and following hysterical attacks, convulsive,delirious,or other,we observe phenomena

similar to those seen after an epileptic attack, and, in general, after all nervous shocks. At first we have to note retroactive amnesia, embracing not only the period of the attack, but also a certain length of time before it; for example, the patient may be ignorant of the circumstances which have provoked the paroxysm, or of other equally important events. With this loss of retentivity, which follows certain paroxysms, there coincides sometimes a loss of receptivity, which is more or less persistent, and which results in the prolongation of the amnesia for a certain period following the attack. It is to this diminution of receptivity, which constitutes a sort of period of apathy, that the paradoxical name of "retroanterograde amnesia" has been given.

So-called Insanity.

Some alienists believe in the existence of a form of hysterical insanity. The psychical manifestations attributed to hysteria must be divided into two distinct groups. Those of one group form but an episode in the attack of hystero-epilepsy, and in delirium, which varies according to the individual, but which is always the same, in the sense that it has a fixed and chronological place in the attack from which it is isolated, rather than in appearance than in reality. This delirium is the sole psychical manifestation which belongs legitimately to hysteria. There is nothing characteristic in the other troubles which, under the appearance of one or the other form of insanity, are seen in connection with the permanent symptoms of hysteria; there is no necessary relation between the insanity and the hysteria, they are simply two troubles combined in one individual. The mental condition of an hysterical subject in the intervals of an attack has no necessary connection with the convulsive neurosis; when we see a condition of folly, a true moral insanity, in hysterical subjects, we are not to regard it as belonging to the hysteria, for it may often remain after the hysterical symptoms have finally disappeared. There is no actual insanity in the disorder in the psychical functions that the disturbances of sensibility in the hysterical may induce.

Attacks of Sleep.

A lethargic or trance-like condition may follow several attacks of the ordinary character, or it may be induced by some emotional storm. These attacks of deep slumber are of only short duration; they have been designated "narcolepsy" by Gélineau, but they are, as has been shown by Ballet, always symptomatic. They occupy an important place in demonomania. They have been regarded as apoplectiform or syncopal attacks, but of late has been interpreted as a larval form of the hystero-epileptic attack, in which an exaggerated importance is assumed by the somnolent phenomena. These crises might be compared to the post-epileptic stertor, and thus be regarded as a larval form of hystero-epilepsy. We may include in the stage of muscular resolution, and of stupor, also most of the soporific attacks which have attracted attention from the earliest times, and have

been described variously under the names of lethargy, apoplexy, drowsiness, syncope, and apparent death. Most frequently the attack is preceded by prodromes analogous to those which announce the other attacks; but these prodromes are not of much assistance in the way of averting the threatened attack. Pitrea has reported the case of a woman who had to yield to the sleep, in spite of shower-baths, and other measures devised to prevent it. In the young the sleeping attack is rare, but it may occur in both sexes in middle life, and even in old age. A sudden onset of the attack appears to be rare in women, but apart from this it occurs, especially in the narcoleptic form, in them as well as in men. In certain cases various syncopal or vertiginous attacks may be regarded as mild sleeping attacks; but more frequently they may be considered in the light of a sort of status hystericus, as they are of very long duration. The attitude of the patient is that of one in a profound and peaceful slumber without stertor; and this is true no matter what way the attack has come on, whether isolated or consecutive to other paroxysmal phenomena. As the sleep is prolonged the face is paler and paler, and the extremities become cold and may sometimes appear to be cyanotic, giving to the person the appearance almost of a corpse. When the pallor is replaced by a congestion of the face, it is often a prelude to an interruption of the sleep by some intercurrent trouble. The muscular resolution is often incomplete and replaced by contracture, either limited to certain muscles, as the masseters, which are rarely unaffected, or generalized. This generalization of the contracture may persist for weeks without appearing to interfere with the functions of nutrition. Often the eyelids, instead of being drooping and without folds, as in normal slumber, are the seat of a spasmodic contracture, which gives place to a more or less continuous tremor. If we endeavour to overcome this contracture, in order to ascertain the condition of the pupils, - which is variable, - we often find that the eyes are deviated inwards and upwards by the induced contracture of the motor muscles of the eye, in the event of its not having existed previously. The breathing of the patient is seldom rapid at intervals; usually it is slow and superficial; sometimes it presents the Cheyne-Stokes type. These momentary accelerations may be in relation with emotional states occurring during dreams. The pulse is usually calm and regular, rarely slow or rapid. The temperature remains normal. The general sensibility is usually diminished, in fact abolished; and often the hysterogenic zones, if any exist, become unexcitable, or, at most, provoke only a few spasmodic movements, or some defensive motions. At the end of the sleeping attack the hysterogenic zones recover their activity, and irritation of them may provoke intercurrent convulsive crises. All the stimuli of the special senses may also remain without reaction. As a rule, after the attack, the patients retain no recollection of these various excitations, but exceptionally they remember what has occurred during the attack, and obey its suggestions. The impressions received by the organ of

hearing are those which are the most often retained. In a certain number of cases the sleep is so troubled by dreams that we may judge of their character from the changing expressions, by movements of attack and defense, etc. The sleeping attacks are often interrupted by spasmodic movements of various kinds. They are of variable duration, lasting from a few minutes to some hours, or even weeks or months; they may occur as a series in rapid succession, and relapses are frequent. Sometimes the patient emerges from an attack as quietly as he would awake from a normal slumber, but more commonly the attack terminates by a spontaneous or provoked convulsive crisis. Not uncommonly the hysterical slumber gives place to other convulsions or paralytic troubles. Hysterical sleep has given occasion to premature burial, but such is hardly excusable even in the condition of apparent death; there is no authentic case of a fatal termination of an attack of this kind. Except in those cases in which the sleep is interrupted by momentary periods of more or less complete awakening, it will be necessary to resort to artificial alimentation, preferably by the oesophageal tube. This artificial feeding sometimes keeps the patients in good condition for weeks, but, as a rule, there is loss in weight at the same time, with a diminution in the excretion of urine and of urea. During the final days of an attack the excretion of urine and the amount of urea are increased. From its external characters alone it is not always easy to recognize the nature of the sleep, i.e., when a patient falls suddenly into hysterical slumber, or when he happens to be found asleep. Although the hysterical sleep is a calm one, it may be accompanied by the phenomena of apoplectic stertor, and even by actual snoring. Ordinarily, however, there are no modifications of temperature, while in the comatose conditions due to organic lesions these modifications are frequent, and also well known. The contractures which accompany hysterical sleep rarely affect the systemic localization belonging to those which occur with organic lesions; and the same is true of the hysterical paralyses occurring in this form. Hysterical slumber may be simulated by certain cataleptoid states occurring in the melancholic insane, in states of apparent stupidity associated with terrifying hallucinations. It is naturally very difficult to detect the simulation of a sleeping attack by an hysterical subject. Hysterical slumber differs in hardly any respect, except in its spontaneity, from the hypnotic sleep; it is accompanied usually by the same abolition of consciousness, and may consequently favour the commission of the same crimes.

Demoniacal Attacks.

These assume the nature of extensive movements which alone sometimes characterize the hysterical attack. These demoniacal attacks are said to be rather frequent in men, and they probably occupied an important place in the convulsive epidemics which I have referred to in the historical section of this essay. One of the varieties of this form of attack is the demoniac attack of Charcot, in which we may see the most disorderly and

strange movements,as well as those of great violence, accompanied by piercing shrieks,provoked by the painful contractures,or by horrifying hallucinations.These attacks,in which we may often find in miniature all the stages of the grand attack,are generally of long duration,sometimes assuming the form of the status hystericus.

Rhythmical Spasms.

A spedially good description of hysterical rhythmical spasms has been given by Pitres,who says that comparable to the convulsions of the grand attack are the contortions,the rhythmical spasms,which we see figuring under the contagious form in the epidemics of the Middle Ages;saltatory chorea,epilepsy,and hysteria, which Germain See distinguished from Sydenham's chorea, and called by the name of rhythmical chorea.The hysterical rhythmical spasms are convulsions,usually of sudden onset and without loss of consciousness,which recur at equal intervals,and with a uniform cadence.They may be complex and systematized,simulating a professional movement -"malleation chorea";or localized to one group of muscles,and cause a very simple movement of flexion, extension,or rotation of the head,or of an extremity - "rotatory chorea".Sometimes we see these rhythmical spasms occurring alone,but they are also seen in the stage of extensive movements of the grand attack,in which they figure under the form of alternate movements of flexion and extension of the trunk,constituting veritable rhythmical bows.Even when the spasms occur alone,we may easily recognize their hysterical character by noting the presence of stigmata,or by a history of other convulsive attacks having occurred in the same individual.The attacks of rhythmical chorea may be provoked,like the other attacks,by physical shock or emotions;often they are excited by imitation,and this is especially true of saltatory chorea.The attacks may be repeated frequently,or at long intervals,or short ones, under the form of a continued series;sometimes the chorea is chronic from the first,and constitutes for months or years a continuance of the malady:Charcot says it may even persist into old age.Sometimes the hysterical tics become permanent,preventing paroxysmal exaggerations from time to time.Whatever may be the form of the hysterical rhythmical spasms,they have a great tendency to recur.Hysterical patients may present spasms of an arrhythmical character - a true arhythmical chorea - which,from its marked resemblance to Sydenham's chorea, is very apt to be mistaken for it,and its real nature entirely escape recognition.The presence of ,in girls suffering from chorea,an ovarian sensitiveness on the side most affected is sometimes the cause of the diagnosis becoming more difficult.Sydenham's chorea may have a sudden onset and appear,without rheumatic symptoms,after some mental shock,in all respects like hysterical spasms;it may also be unilateral;it is liable to recur;and it is frequent at the age of puberty.On the other hand,chorea,like the spasmodic manifestations of hysteria,is especially influenced by the conditions which change and improve the nutrition.Although

we may admit with Charcot that chorea in hysterical patients is merely a coincidence,we can not deny that the two affections may be present in the same individual.At the best the diagnosis between ordinary chorea and certain forms of hysteria is no easy task in certain cases.To hysteria coördinate spasms are not peculiar, for we find them also in the affection known as "myriachit","latah",or the "jumping malady",which occurs most commonly in children and adolescents under the form of sudden muscular startings,often accompanied by the utterance of words under the form of acholalia or coprolalia;these movements are rarely as regular as those of rhythmical chorea.From the very beginning of the attack the jumping malady is,as a rule,chronic,and it presents none of the permanent stigmata of hysteria. Pitres very properly groups among the rhythmical spasms of hysteria the electrical chorea of Henning,Henoch, and Bergeron.The electrical chorea of Dubini is an affection which begins with pains in the head,back of the neck,and lumbar regions,followed by twitchings analogous to those produced by electricity.The affection has nothing to dowith the rhythmical spasms,for it very rapidly assumes a serious aspect and terminates,as a rule,in death.Some authors have held that paramyoclonus multiplex is related to hysteria:it is characterized by the fact that percussion over the tendons always causes spasms.Nevertheless,it presents none of the well-known permenent stigmata of hysteria.

Catalepsy.

This peculiar condition may be observed in connection with other syndromes than those of the hysterical series,yet it is of frequent occurrence in attacks of hystero-epilepsy,in men as well as in women. It often complicates the emotinal attitudes.Like most of the other episodes of the grand attack,catalepsy or ecstasy or rapture may occupy a predominating place in the paroxysm,or may even exist almost alone,though this is not common.The duration of the cataleptic stage is very variable;when it forms a part of a major attack it is generally of short duration;but when it occurs alone it may last several hours,or even for several days,and may constitute a sort of status.Catalepsy is characterized by the possibility that the patient may assume spontaneously,or may be placed mechanically,in attitudes which remain fixed,although the respiration and the circulation of the subject betray a putting forth of not the least effort.The attitude of the patient is accompanied foten by a corresponding expression of the face,so that in catalepsy and in spontaneous ecstasy the attitude would appear to be in relation with an emotional state provoked by an intense sensorial hallucination.The fixity of the attitude is not absolute, for the limbs finally obey the laws of gravity,and at the end of a fixed period,which hardly exceeds the limit of effort of a strong man,the patient falls again into an attitude of repose.But this period of repose may occupy but a brief interval between two cataleptic attacks,so that we may observe a cataleptic condition

- a sort of status catalepticus - without a return to consciousness.The presence or absence of other hysterical symptoms will determine the diagnosis of hysterical catalepsy.The prognosis of the cataleptic attacks is the same as that of the attacks of sleeping;there is very little danger as regards life,but there is a great tendency to recurrence,and the attacks may be of very long duration.The cataleptic attacks cease spontaneously,or under the influence of irritation of an hysterogenic zone,or simply under the influence of an intense mental impression.The rare instances in which death has been attributed to hysterical catalepsy are as doubtful as those in which death has been supposed to result from the sleeping attacks.

Delirium.

Hysterical delirium may occur in both sexes, and as well in children as in adults.Indeed,as was noted by Briquet,the paroxysms of delirium are more frequent in children,and in them they are often the first manifestation of hysteria,and its only manifestation,for at that age the stigmata are often wanting. The delirium of the fourth stage of of the hystero-epileptic attack may occur in the form of a single paroxysm,or in that of a status;it may assume the most varied forms.The attacks of hysterical delirium may occur under the maniacal or the melancholic form,and,as a rule,do not differ from ordinary mania or melancholia.The differential diagnosis can be made only by the observation of other hysterical troubles,and sometimes by the course of the affection.The maniacal access,which does not occur as a sequel of the delirious stage of the attack,may arise suddenly in consequence of a moral or physical shock.Sometimes it presents interruptions appearing suddenly and lasting a variable period.It may also terminate suddenly.These are,however,not characteristic features of hysterical delirium,the duration of which may vary from a few hours to several months,and be subject to relapses which may bear a relation in time to the menstrual epochs.The exuberance of language, the variety of the gesticulations,the intensity of the hallucinations,the frequency of the representations of animals,or of a change of personality so characteristic of epidemics of delirium,the transformation into animals of various kinds,are all signs pointing to a probability only,upon which too great stress should not be laid.There is a form of delirium accompanied by troubles of memory and of personality,which has been described by Pitres,and to which he applies the designation of "ecmnesia" or "partial amnesia".In it the recollection of events occurring anterior to a certain period is perfectly preserved,while the remembrance of what has happened after this period is entirely lost.According to the duration of the period of his life,the memory of which has disappeared,the patient reasons and acts as he would be presumed to reason and act in his childhood or adolescence.The attack may terminate,like the other abnormal paroxysms,suddenly without any

disturbance or following a convulsive attack.In general, the restoration to health is complete.A knowledge of the previous history,and the presence of permanent stigmata,enable us to differentiate attacks of hysterical delirium from the delirious fits of degenerates,from acute attacks of ordinary mania,and from certain forms of toxic delirium,such as those caused by belladonna, hasheech,and especially alcohol;alcoholic delirium, indeed,has a number of characters in common with the delirium of hysterical patients,such as the terrifying hallucinations of sight,professional preoccupations, and a certain yielding to the influence of suggestion. Hysterical phenomena may be even excited by these intoxications,but,as a rule,they have peculiarities of their own which serve to distinguish them.

Somnambulistic Attacks.

These bear an undoubted relation to hysteria and to its attacks of sleep,no matter whether spontaneous or provoked.It is my opinion,the assertions of the Nancy school notwithstanding,that the somnambulistic phenomena,susceptible of somatic characteristics,occur only in subjects with hysteria or neurotic taint - conditions which are distinguished only theoretically. Numerous writers have well shown the hysterical nature of spontaneous somnambulism.By this phenomenon we mean a state in which the subject executes the actions of ordinary life,but remains without reaction to the stimuli which would excite these actions in the waking period.It may be diurnal or nocturnal.The attack of somnambulism,like the attack of delirium,may follow a convulsion,or appear suddenly during the night,while the patient is in a normal slumber,or during the day under a narcoleptic form.It is not very uncommon to find somnambulism constituting a more or less durable episode of the grans attack.During the somnambulistic attack,whatever may be the apparent lucidity of the acts,the general sensibility appears to be abolished; the patient reacts neither to contact nor to traumatisms which are capable of casing pain;and when he wakes up he appears to know nothing of the injuries he may have received whilst wandering about during his sleep. On examining such a person,we find that the eyes may be open or half closed,the gaze is fixed and without expression,the pupil is immobile.Vision is not abolished in the proper sense of the word;the patients may avoid obstacles,read,etc.,but the objects which are foreign to their actual preoccupation do not appear to attract their attention.Just as they see only whatthey look at, so somnambulists hear only what they listen to.Various hallucinations are sometimes provoked by irritation of smell and of taste,as well as by those of hearing and sight,which proves that the senses are not completely unresponsive to excitations.The systematization of the attention,and the narrowing of the capacity of consciousness,which give rise to more or less exclusive monoideaism, serve to explain the psychical exaltation which is sometimes observed in these patients.There results from the psychical state in question a great

modification of personality, a second state which is accompanied occasionally by evidence of correlative changes in the physical condition, constituting sometimes a disappearance of the contractures, paralyses, spasms, and other permanent hysterical symptoms. This systematization of the attention plays an important part in the security of the movements in the most critical positions: these scarcely inspire the patient with fear. As soon as the attack of somnambulism has ceased, the memory of it is effaced; but in subsequent attacks the patient may remember what has taken place in in previous ones; one might say it was a dream in several acts. The duration of the attacks of somnambulism is extremely variable; when they are so prolonged as to constitute a status, the second stage may equal in duration the first, so that the personality of the subject may be doubled, divided into two periods of equal extent. Males as well as females may suffer from these prolonged second states. The second state may sometimes present so exactly the appearance of the first, or waking state, that it has received the name of "vigilambulism". Of the nature of somnambulism are the attacks of the so-called "ambulatory automatism" when manifested in hysterical subjects. It is an impulsive vagabondage which hardly differs in itself from the ambulatory automatism of epileptics. In the absence of the stigmata of hysteria - which are found in a measure in epileptics - and of the characteristic paroxysms, the diagnosis may be reserved. The loss of memory is not constant, and it may be observed also in epileptics; the results of treatment are not always to be relied upon in diagnosis, for epilepsy is not constantly benefited by the bromides. Charcot thought that the manifestations of violence were characteristic of epilepsy, but they are sometimes wanting in epilepsy, and may be present in hysterical subjects. The migrations of the insane are characterized by the absence of stigmata and of convulsions, and by the partial or total persistence of consciousness; however, the insane wanderers, etc., often present neurasthenic symptoms, which are distinguished from hysterical symptoms rather in nosology than by their nature. From the evident symptoms it is usually easy, comparatively speaking, to eliminate hysteria in the cases of migrations which are observed also in those suffering from the delirium of persecution, who find in their change of domocile a relief to their insane preoccupations; and the same is true of some melancholics, dipsomaniacs, and those suffering from general paralysis.

MOTOR ACCIDENTS - PARALYSES AND CONTRACTURES.

A certain degree of motor weakness, usually more marked on the left side of the body and on one side only, is very commonly observed in hysterical subjects in their normal condition, in the intervals between the attacks. This weakness usually coincides with anaesthesia, or with some of the various disturbances of sensibility. Again, in place of a simple weakness of the organs of locomotion, we sometimes observe functional anomalies,

a tendency to rigidity, to contracture, or to tremor. It is in conditions occasioned by a depressed state of the system that the germs of paralysis and of contractures may become developed in. For a long time it was held that these paralyses and contractures formed, in a measure, appendices of the attacks, but, in reality, they have hardly anything to do with the attacks in more than one-half of the cases, and perhaps more particularly in those which have been called apoplectiform or lethargic. The The emotions, if intense or long continued, may produce these motor troubles. Intoxications and infections may produce the same results, acting as causes of depression, and somay cold. Fatigue may have the same effect - paralysis by exhaustion - and it appears to be capable of acting even when it is but the result of a dream: the latter prolonged may even give rise to a paraplegia. Traumatisms, shocks of all kinds, local affections, and rheumatism, all appear to play an important part in the production of these paralyses and contractures. Charcot attributes a predponderating influence to the imagination in the production of traumatic paralyses, and he has given the name of period of preparatioj, of meditation, to the period of time which separates the receipt of the shock from the appearance of the paralytic symptoms. This period may often fail, however, the paralysis manifesting itself immediately; and, furthermore, the phenomena of shock which are often seen in the lower animals show that the intervention of imagination is not indespensible. Conditions of exhaustion and of depressing emotions precede most so-called paralyses of a psychical nature, and the effect of physical or moral shock may be more simply explained as mere fatigue. Hysterical paralyses are excited by other factirs than the violent and depressing excitations: there are paralyses of irritation, such as the night palsy (transitory) of Weir Mitchell. The localization of the paralyses and contractures has related to it the exciting cause of the same. In a general way it may be said that it is the side which is amyosthenic that is most liable to be affected; and this explains the frequency of the left-sided charatter of these troubles. The paralysis which follows an apoplectiform attack is often hemiplegic, that which follows a traumatism is usually more marked in the injured limb; and it is the same with that which follows excessive labour, for it is most pronounced in the part in which the fatigue is most felt. The paraplegic form is not uncommon after moral shocks. The varieties of paralysis and contracture are not equally frequent; the hemiplegic form is the one which is most often encountered - in about a half of the cases, and usually on the left side; the paraplegic form is seen in only about one-sixth of all cases; the localized forms are exceedingly variable, the different ones, although altogether constituting about one-third of all cases, are, taken by themselves, rather uncommon. There is no special preference for sex manifested by the paralysis and contractures, for they are seen equally frequently in both males and females; they are rare in the aged, and in children below the age of ten years.

Hysterical Paralyses.

These are manifested as regards onset in a variety of ways - slowly, suddenly, or even instantaneously.

Sometimes the paralysis is preceded by formication, numbness, or pain. In general, it is incomplete. Usually, as regards this, it will be noted that even when both legs are affected, and the patient is confined to bed, a careful examination will show that the paralyzed members are capable of motion in some of their parts, although this power is, it is true, very slight. Very often hysterical paralysis is accompanied by troubles of sensibility, which are superposed upon it with a remarkable exactitude. Sometimes, however, the disturbances of sensibility are much more extensive than the motor troubles, and may involve the organs of special sense, and the whole of one side. The paralysis affects the antagonistic muscles equally. It is only rarely accompanied by nutritive disturbances, and the lowering of the temperature, which has been noted, is very inconstant. It is not only voluntary movement which is affected in hysterical paralysis, but the muscular tonicity as well; this is well seen in the face, where the wrinkles are effaced and the nostrils are flattened; the mouth is often drawn to one side. This loss of tonicity is not by any means peculiar to organic paralyses, as has been asserted. The paralyzed muscles have lost their electrical excitability; their electrical contractility is preserved, but whatever may be the intensity of the current it is not felt. Sometimes, however, the electrical contractility is diminished or even abolished; and the power of electrical contractility may have its return preceded by that of voluntary movement. Usually the tendon reflexes are exaggerated; but, even when there is persistence of sensibility, the cutaneous reflexes rarely remain. It is not infrequently possible to excite even an epileptoid tremor; the trouble is a sort of spasmodic paralysis, and is readily transformed into contracture. It is very exceptional to observe a diminution or abolition of the tendon reflexes, and in such exceptional cases a contracture is hardly to be feared; but in the course of a relaxed paralysis with loss of reflexes, we may occasionally see the latter reappear and then become exaggerated, and in such cases the opportunity for contracture returns. Variation in intensity under the influences of very slight causes, or even without apparent cause, may be taken as one of the characteristics of hysterical paralysis. This latter is sometimes seen to be fixed, and to resist remedial agents for years, while at other times it is not only variable in its intensity but changeable in its seat, passing from one side to the other, and from one region to another, affecting successively an arm, a leg, the muscles of the larynx, the diaphragm, etc. Very frequently the paralysis is transformed into a contracture, which latter is in rare instances established gradually - the usual thing being for it to show itself following a traumatism or a psychical shock. Termination of paralysis in recovery is the rule, and it may be gradual or sudden. The latter occurs especially as the consequence of some lively mental impression. A gradual recovery is sometimes announced by feelings of uneasiness in the limbs, or by dreams of movement.

Hysterical Contractures.

True hysterical contracture is specially apt to be provoked by shock, local irritations, and other

stimuli.It is a common experience to find the condition existing in a latent form - the diathesis of contracture - in hysterical persons,who have an exaltation of the tendon reflexes,epileptoid tremor,and peculiar electrical reactions.Anaesthesia or hyperaesthesia mau accompany permanent hysterical contracture.Painless contracture is the more common;it may appear suddenly after the receipt of a traumatism,or in consequence of some strong emotion; it is then sometimes the first manifestation of hysteria.At other times it is preceded by a weakness or numbness of the limb or by spasmodic symptoms,such as epileptoid tremor,twitchings,and so forth.It mau increase gradually,or it may attain its maximum at once.The latter is the more usual mode of onset.The stiffness is considerable and is fixed,but it sometimes may be overcome by a slow,continued,and even traction.Whatever may be the attitude of the limbs,the antagonistic muscular groups are equally affected,although there must be some predominence of action,on one side or the other,which determines the attitude taken.While hysterical paralysis varies frequently in intensity,contracture is in general remarkably persistent and unvarying.There may be a momentary resolution during sleep,but in cases of some standing this resolution is usually incomplete.The sensibility is ordinarily affected just as in cases of paralysis;anaesthesia is the modification most commonly noted.Too often the contracture persists for months absolutely immobile,but sometimes it disappears suddenly, and then as suddenly reappears - "contracture à répétition;" at other time it disappears from one region to appear in another - "contracture erratique"(Richer).Its termination may be slow or sudden,or rather rapid.The sudden termination is rather a frequent consequence of emotions,of the so-called subversive treatment;but even in these cases we often see a rather marked paresis persist for some days,and the tendency to contracture still remains,showing itself,by an epileptoid tremor,sometimes for months.The slow termination is effected by a diminution of the stiffness,which is replaced by a paresis, which in turn disappears slowly;but the tendency to contracture often persists for a long time.It is not a common thing to hear these patients complain of pain. sometimes,however,permanent contracture is accompanied by shooting pains,or very troublesome formication,in the affected members.Occasionally these pains are so intense that the patient begs for an amputation of the limb.In one such case Charcot advised the stretching of the median nerve,and this was followed by a disappearance of the pains.The latter are sometimes relieved by morphia,and Briquet speaks highly of the efficacy of wet-cupping.We sometimes we variations in the contracture,and that it becomes exaggerated by the influence of the attention or by manoeuvres intended to overcome it;and Richer thinks that these modifications are characteristic of what he calls"psychical contractures".It may happen that instead of persisting constantly,it may cease during sleep;again,the attitudes may not obey the law of being in flexion for the upper extremity,and in extension for the lower;and the disorders of sensation

may also be wanting.It is only very occasionally that the paralyses are accompanied by muscular atrophy,and even less often do we see fibro-tendinous retractions in connection with contractures.In short,the paralyses and contracture are very seldom complicated.

Forms of Hysterical Paralysis.

These are various - hemiplegia,monoplegia,paraplegia, and quadriplegia - and are assumed also by the contractures.

Hysterical Hemiplegia.

This occurs most frequently in adults who are most exposed to the exciting causes of the affection,but may be seen at any age.Either flaccid or rigid,it is, infact,one of the commonest forms of hysterical paralysis;in nearly three-quarters of the cases it is located on the left side;and it follows and invades the same parts as hemianaesthesia and hemiamyosthenia,of which it seems to be an exaggeration.It is a well-known fact that the paralysis varies greatly as regards its intensity - from a slight paresis to a complete paralysis. Unlike what is seen in organic hemiplegia,the lower extremity is ordinarily the most affected in hysterical hemiplegia.When the motor paralysis is very pronounced, the troubles of sensibility are usually also more marked,and in such cases the special senses are also often involved.The walk is quite characteristic.In organic hemiplegia the patient first carries the trunk over to the non-paralyzed side,and rests all the weight of the body on the sound limb,then carries the paralyzed limb forward,making it describe the arc of a circle;the hysterical patient,on the other hand,drags the affected member after him,sweeping the ground with it.Flaccid hemiparaplegia having also this gait,the walk of the hysterical paralytic is,strictly speaking,not characteristic. It is by a study of the other associated troubles,and of the previous history of the case,that we can usually arrive at a diagnosis,and overcome the difficulties of the same.Sensitivo-sensorial anaesthesia does not exclude the possibility of an organic lesion,for these unilateral troubles of sensibility may be associated with a capsular lesion,and even concentric narrowing of the visual field.The preservation of the tendon reflexes in hysteria is a valuable sign,but it may be wanting.Flaccid hemiplegia is more common than the hemiplegic form of contracture.In the lower extremity extension is the more frequent position,and a rotation inwards often accompanies it.The superior extremity is usually in flexion;the arm is in adduction,the forearm in supination is flexed at a right angle with the arm;the hand is also flexed. In exceptional cases of extension of the forearm,the hand is generally flexed in forced pronation,and the fingers are lighly flexed in the palm.The question as to whether or not facial paralysis exists in hysterical hemiplegia has long been the subject of great controversy,some affirming,others denying.Certain authors claim to have shown that in hysterical hemiplegia there may be a condition of spasmodic contraction,sometimes with twitchings of the muscles of the face on the opposite

side,together with superposed anaesthesia or hyperaesthesia.These facts seem to argue against the existence of facial paralysis,but the observations of Chantemesse, and of Baillet,in 1890, have since established its existence beyond question.Even in simple hysterical amyosthenia there is paresis of the tongue on the corresponding side.An analogous paresis can be demonstrated in the lips and in the masseter muscles.Furthermore,in hysterical amyosthenics there is a retarded reaction in time in the weakened muscles of the face and jaw;and the glossolabial contracture,on the side opposite the paralysis of the members,may be the consequence of a paresis of the face on the hemiplegic side.Indeed,there is sometimes found in the induced paralysis of hysterical patients an increase of motor energy on the opposite side;and as the hemiplegia becomes less,there may be a diminution of force on the healthy side.This sort of balance of nervous action is not readily explicable. An analogous fact has been described in connection with the sympathetic nerve.It is a constant thing to find that,at the same time that galvanization of the upper part of the sympathetic nerve reduces the temperature of the corresponding ear,we see an elevation of the temperature of the other ear.It is the usual thing to observe a coincidence of the facial paralysis and the glossolabial spasm with the hemiplegia.Sometimes the face is contractured,while the corresponding limbs are flaccid. Sometimes the paralysis,or the spasm,coincides with a monoplegia;Charcot has observed a glossolabial spasm coincident with a paraplegia,the upper extremities being exempt.Paralysis and spasm may be observed alone,as,for example,after a traumatism.Facial paralysis may occur under the tonic or the clonic form.One sometimes sees that clonic spasm coincides with a spasm,also clonic, of the sterno-cleido-mastoid muscle of the same side. Exceptionally the spasm,although more marked on one side,involves the entire face;at other times,on the contrary,it may be localized to a small number of muscles. The muscles innervated by the motor branch of the trigeminal nerve may be affected like those supplied by the facial.Exceptionally the spasm alone affects the tongue or the orbicularis palpebrarum;it is usually seen in connection with the inferior facial and platysma myoid - the so-called glosso-labio-platysmal spasm of Gilles de la Tourette.The tongue is excessively deviated.When this spasm becomes very intense,the domain of the superior facial is affected.Secondary contracture of the face - in which disturbances of sensibility are usually wanting,and which is hardly limited to the face - can scarcely have hysterical facial spasm confounded with it.The condition is shown upon voluntary movement,just as is paralysis,which may pass unperceived in repose, being betrayed only by a slight relaxation of the features,and especially by a flattening of the nares,which is seen frequently in simple amyosthenia.Although cases of many years duration have been observed,both the isolated paralyses and spasms of the face usually recover spontaneously within a few months;and neither in spasm nor paralysis are there any modifications of the

electrical reactions.Cases of paralytic torticollis have been reported,but contracture is more frequent than paralysis,so that spasmodic torticollis is more frequently seen.This latter condition may manifest itself in the rhythmical form or be of an intermittent character.Paralyses of the muscles of neck may be seen as isolated phenomena:they exist to a certain degree in hysterical hemiplegia.A diminution in the excursion of the diaphragm may be seen in hysterical hemiamyosthenia, and is termed the "diaphragmatic phenomenon of Litten". It seems to imply a weakness of this,as well as of all the muscles of imspiration.Briquet has observed that contracture of the abdominal muscles on one side is capable of producing deviations of the trunk.No observations of isolated paralyses of the trunk muscles have been recorded,so far as I am aware,except in that of the serratus magnus reported by Verhoogen.More commonly the muscles of the trunk are affected by contractures, which may occasion deformities.Duret has described an hysterical kyphoscoliosis,and,after him,many cases of hysterical curvatures of the spine,involving almost exclusively the lumbar region,and accompanied,as a rule, by a general rigidity of the trunk.The spinal curvature is usually one of large radius.When it is accompanied by local pain,and especially by paraplegia,it may be mistaken for Pott's disease.These curvatures,which disappear under the influence of general anaesthesia, may be attributed to contracture of the muscles of the deeper layer of the back,of the quadratus lumborum and psoas.These contractures are of variable duration and apt to recur.

Hysterical Monoplegia.

A localized or monoplegic character may be assumed by the hysterical paralyses and contractures. It is traumatism thatplays the important part in the etiology of hysterical monoplegias;the upper extremity, which is the most exposed,is the most apt to be affected by these paralyses,which,for the same reason,are more frequent in men.It is especially in these traumatic monoplegias that Charcot has regarded the suggestion under the influence of pain as an important etiological factor.The psychical theory of paralysis is based on the fact that motor troubles do not always immediately follow the shock,but are often preceded by a period of meditation or preparation.We must,however,distinguish the different parts played by imagination and emotion; and it has also been objected to this theory that the physical effects of shock are not complete immediately after its intervention.Sometimes the brachial monoplegias - which are complete or incomplete,generalized or limited - are associated with a paretic condition of the lower extremity.The paralysis is accompanied by cutaneous anaesthesia,which affects a peculiar disposition;it does not follow the distribution of the nerve trunks,but occurs in areas representing geometrical segments with well-defined boundaries,and superposed on the paralyzed muscles like a cuff,a sleeve,or a glove, according as the paralysis involves the forearm,the shoulder and arm,or the hand.The "mitten" anaesthesia

coincides with a paralysis of the hand without involvement of the fingers,a form which is not very rare.All the forms of cutaneous anaesthesia are present,i.e., sensibility to pain,to temperature,and to electrical currents,as well as tactile sensibility are lost;and the same is true of the muscular and articular sense,as well as the sense of position.It may,however,happen that the tactile sensibility is preserved,while that of temperature is preserved.The fact of the existence sometimes of profound trophic disturbances in hysterical palsies is not negatived by this so-called syringomyelic dissociation of sensibility.Hysterical monoplegias are subject to recurrences and intermuttences,and the course of the monoplegias of the arm are very variable.These paralyses are usually of short duration in children,but not so in adults,especially in men;cases occurring in the latter have been reported which lasted for twenty years.It would appear that hysterical subjects have a special tendency to anatomically systematized paralyses resulting from local irritation;a previous intoxication, by determining a local weakness,may have the same effect; for example,an hysterical person may be predisposed to become the subject of a radial paralysis by menas of poisoning by lead.One need scarcely anticipate any difficulty in the diagnosis of hysterical brachial monoplegia.Still,it may happen that a limited lesion of the internal capsule can determine a monoplegia with anaesthesia,but it is difficult to imagine such an affection without at least slight apoplectic symptoms,and the paralysis would be rapidly followed by contracture. An hysterical monoplegia,with trophic troubles and dissociation of the anaesthesia,might simulate the occurrence of a syringomyelia,and the differentiation would be difficult without a knowledge of the previous history. The radicular paralyses of the brachial plexus are to be recognized by their distribution,and by the characteristics of neuritic paralyses.In general,the description just given will apply to the somewhat rare **crural monoplegias**.We find the same segmentary anaesthesia under the form of a boot,a sock,or one leg of a pair of drawers.The same conditions as in the paralyses control the occurrence of the monoplegic contractures of the lower extremities,where also they appear to be more frequent - contrary to what occurs with the paralyses.The different segments of the arm may be contractured separately,and the contracture affects either flexion or extension,in both cases the member being applied to the body. In the extension type the upper extremity is extended along the body,the position of the wrist varying in different cases.The hand is usually closed,but sometimes the fingers are contractured in the position of holding a pen.When the fingers are contractured in extension,they are at the same time approximated to,and firmly pressed against one another,and rarely are separated. In the closed-fist attitude,the thumb is sometimes covered by the other fingers,sometimes applied alongside the index,and sometimes carried farther forwards,so that its terminal phalanx is in contact with the second phalanx of the middle finger.Traumatism,such as sprains,and the

like,are very common causes of contracture of the lower extremity,though the condition is also sometimes a sequel of the attack itself.The various segments of the limb may be contractured independently,and in that case it is the foot which is more often affected,presenting the different deformities of clubfoot,more frequently than that of equinovarus,with torsion inwards,and with very pronounced flexion of the toes.Exceptionally the toes are not flexed,more rarely we find pure equinus, and talus is still more rare.The contracture is one of extension in the case of arthralgia of the hip.When the other segments of the limb are affected,we also find them usually in extension;but flexion may be observed,the thigh being flexed upon the pelvis,and the leg upon the thigh,so that the heel touches the buttock.Some of the contractures are very painful;and usually the monoplegic contractures are accompanied by the same disturbances of sensibility as the corresponding paralyses,especialyy by anaesthesia.

Hysterical Paraplegia.

The paraplegias of hysterical subjects are flaccid or rigid,complete or incomplete;and they may affect both the lower limbs,or all the four extremities.One of the most frequent of all the forms of hysterical paralyses is that which affects the lower extremities.It is very frequently caused bu fatigue,also by any of the ordinary causes,and especially by the emotions.In the case where the paraplegia is complete the patient is confined to bed,and sensibility in the affected extremities is entirely abolished,and even the sensation of displacement is lost;in consequence of this,it becomes necessary to watch the position of the limbs in order that they may not contract vicious attitudes which may finally become fixed,by the fibrotendinous contractions.Trophic disturbances are rare; nevertheless,one sometimes sees marked atrophy of the muscles,or even sacral bedsores.Even after it has lasted for many years,the paraplegia may be recovered from, and that,too,in spite of the accidents just named.It may be noted that the disturbances of sensibility are not always confined to the same regions as those of motility;we may see the anaesthesia arrested just above the knee,or mount up as far as the umbilicus.Although, as a rule,troubles of sensibility are more frequent and more marked than those of motility in hysteria,we may see hysterical paraplegias in which there is no disturbance of sensation.Whether the paraplegia be flaccid or rigid,it may be accompanied by vesical and rectal troubles,retention being the more common,although we may observe incontinence.Even after lasting as long as a score of years,paraplegias with contracture may be recovered from.The tendon reflexes in cases of flaccid paraplegia are normal:when they are exaggerated and when there is a tendency to epileptoid tremor,contracture is threatening.Spasmodic paraplegia is not exceptional in hysteria.As a rule,the limbs are in the position of extension,with more or less marked adduction;the foot may preserve its normal position,forming a right angle with the leg,or it is in a position of equinus,in which

case, the more frequent one, walking is impossible. The affection may be complicated with fibrotendinous retractions, which remain after the paraplegia has ceased, and so mask the subsidence of the latter. In cases of spastic paraplegia we sometimes see retention of urine. Most of the paralyses following medullary lesions, Pott's disease, compression by syphilitic, tuberculous, or other lesions, multiple sclerosis, etc., may be simulated by the different forms of paraplegia, varying as they do in intensity from paresis to paralysis with complete relaxation or inflexible rigidity. The first step in the diagnosis consists in a search for permanent stigmata, but even when they are are found, we have not arrived at a certainty; for it is not rare, indeed, to see hysteria coincide with an organic affection of the nervous system, preceding or following it. Nevertheless, in cases of organic paraplegia subjective sensations, hyperaesthesia, formication, etc., are the rule; but in hysterical paraplegia, which is ordinarily accompanied by circumscribed anaesthesia, these subjective symptoms are rare. In spinal paralyses the electrical reactions are quickly changed, but only exceptionally affected in hysterical paralysis. Although in hysteria we may observe disorders of micturition, they are exceptional, and are not accompanied by the purulent cystitis which belongs to the complications of organic paralyses. Trophic disturbances are rare in hysteria, although we may occasionally observe muscular atrophy; but decubitus with grave symptoms is rare. The question of the existence of an hysterical pseudotabes was raised formerly from the fact that one sometimes sees, though very rarely, subjective phenomena in hysterical paraplegia. Hysterical pseudotabes is the result of various conditions which may provoke hysteria, among them especially the emotions. The beginning of the trouble is usually slow and insidious, and its progress is gradual, and often interrupted by periods of temporary improvement, or of apparent cure. It is characterized chiefly by the inability to stand steadily, and by an ataxic gait which is increased in the dark, or when the eyes are closed. To these troubles are added sensations of numbness, of formication, of pricking, lightning pains, a painful spinal point, gastric or anal crises, and vesical troubles. The resemblance would be complete were it not that the tendon reflexes are usually intact and the tabetic disturbances of vision, such as the Argyll-Robertson pupil, and atrophy of the latter structure, are absent. In certain cases, indeed, we must wait for the further development of the disease before we are able to definitely say what is the trouble suffered from.

Hysterical Quadriplegia.

It is very seldom that one comes across a case of paralysis or contracture of both legs and both arms, and then only, as a rule, in persons who have some incurable nervous disease. It is occasioned by the same evil influences as the other hysterical affections, and is subject to oscillations, and to recurrences. During some period at leastof their evolution, these paraplegias are usually accompanied by paralysis of various organs,

of the muscles of the tongue, pharynx, thorax, or bladder, and there are usually also disturbances of sensibility, and sometimes also vasomotor troubles. The onset of the paralysis may be sudden, following an attack, a traumatism, or some mental shock; more often, however, the affection begins gradually, and is slowly progressive. It begins usually in one of the lower extremities, and extends first to the upper extremity of the same side, and then invades the opposite side; as a rule, it is the left side which is first affected and in which the paralysis is most pronounced. Flaccid paralysis often precedes the contracture. In the diagnosis of this affection, we must always bear in mind that hysteria may coincide with a gross organic lesion. We may exclude cerebral diplegias, in which the disorders of sensibility are wanting, and which are accompanied by a special mental condition, and by secondary contractures with the reactions belonging to them; cervical pachymeningitis and Pott's disease of the spine are accompanied by characteristic local symptoms. In spinal paralysis there is a loss of reflexes, and a more general and more marked muscular atrophy than is seen in hysterical paralysis; furthermore, the disorders of sensibility are wanting. Peripheral polyneuritis has its own special etiology, and is accompanied by characteristic electrical reactions.

Astasia Abasia.

This is an hysterical condition characterized by the fact that the patients are able to make rather energetic movements while in bed, but are incapable of standing erect or of walking. Astasia and abasia most frequently coexist; but, while abasia may exist alone, astasia cannot exist without abasia; that is to say, it is possible that a patient may stand without being able to walk, but no case is known to me in which walking was possible and standing impossible. Astasia abasia is regarded not as an imcomplete paralysis, but as a systematic paralysis of the movements necessary for walking and standing; its characteristic feature is held to be the integrity of movements when the patient is in bed. But absolute integrity of movements can be demonstrated only by measurements of energy and rapidity of motion, and, thus far, these measurements are wanting in cases of astasia abasia. The existence of a systematic paralysis in hysterical persons has not been proven by unequivocal evidence, and, as a systematic paralysis, astasia abasia does not exist. In it there is a motor weakness of the lower extremities through defective coördination in standing and walking, that is to say, there is diminished energy coincident with a defect in the precision of movements. In this pathological state, as in the physiological conditions, there is a correlation between the energy, the rapidity, and the precision of the movements. As long as it has not been shown by methods of precision that the disturbances of coördination do not coincide with a defect in the other qualities of movement, we must regard astasia abasia as an imcomplete paralysis. In healthy persons, a diminished force of movement, under the influence of fatigue, loss of blood, etc., necessarily brings with it a diminished precision of movement, a

a certain incoördination which, by reason of their tendency to spasm, is exaggerated in hysterical patients. We cannot conclude from the fact that a patient can stand in water, but not on land, that he has a systematic paralysis, we can only say that he is incapable of holding himself erect when he is not relieved of a part of the weight of his body equal to that of the volume of water which is displaced. A patient with astasia abasia is in an analogous position; he is incapable of standing, or of walking, when he has his weight to support, but he can do so when he is relieved of this weight. Incomplete paraplegias, with or without incoördination, are worthy of study, whether they deserve or not the name of astasia abasia. The characters which have gievn to them this special designation are the impossibility of walking - abasia - and that of standing - abasia; the first never passing into the second, contrasting with the possibility of executing all the movements concerned in walking while the patient is reclining in bed. When the movements are made with the patient lying down, they are seen to be weakened and retarded, so that this contrast is only apparent. The loss of power is the special characteristic of astasia abasia, which latter may occur under the paretic or the paralytic form. The patient is like a very young child who has never yet tried to walk, making his first step while held by the nurse. This form has different degrees; and the astasia abasia may occur in spasms. Some patients can walk when they enlarge their base of support by separating the legs. When the paresis is more marked on the one side, the patient can walk only by putting forward the same foot, and bringing the other up to it. This form may present rapid oscillations in intensity, the patient being able to make a few steps and then suddenly falling. The paralysis may have motor incoördination superadded, and there appears to exist a choreiform astasia abasia - or flexion type of Charcot - in which standing is disturbed by sudden flexion of the pelvis on the thighs, as well as of the thighs on the legs. These troubles are increased during walking; the patient seems inclined to fall at each step, and has to struggle to maintain his equilibrium; he bows and straightens himself up alternately by movements which become more and more violent and rapid as he goes on.

Hysterical Spasms.

Walking is disturbed, in the tremulous astasia abasia of Charcot, by a trepidation, which is an exaggeration of that which we sometimes see in spastic paraplegia when an attempt is made to stand the patient on the end of his rigid foot. This trepidation may increase to such an extent as to constitute a saltatory spasm, i. e., it becomes a sort of stamping movement, or even actual leaping. Saltatory spasms may be produced by transverse myelitis, compression of the cord, lateral sclerosis, and perhaps even by tabes dorsalis. They are apt to be more tenacious in adults than in children. Their nature may be rather difficult to distinguish, for these motor troubles may be the only manifestations of hysteria. When there are no stigmata, we must search for the symptoms which may be associated with incoördination in

cerebellar lesions,as well as in multiple sclerosis. The limbs,face,or neck may be affected by the hysterical rhythmical spasms,the same as those movements purposely executed in health,but steadily repeated with considerable force.They occur in attacks lasting for a few minutes,or a few hours to several days.They cease during sleep,and apparently consist of a fractional part of a major attack.Among such rhythmical attacks may be mentioned the nodding spasms,in which the head is rolled or shaken or rotated involuntarily,and so forcible that it is impossible to check it by manual strength. The choreic dance,or saltatory chorea,which played so important a part in the mediaeval epidemics,is of this nature.Some patients move the arms as if heaving a hammer or other implement,and,as a rule,the rhythmical spasms show the dominance of a fixed idea.In rare instances the movements may closely simulate the incoördinate,involuntary,arrhythmical action of Sydenham's chorea.The diaphragm may be affected,causing a peculiar, hoarse,barking cough,and sneezing and grunting may be repeated and of considerable duration each time.

Hysterical Twitchings.

These occur with more or less irregularity, and may be regarded as fractional rhythmical spasms. There may occur winking,grimacing,shrugging,sniffing, coughing,movements of the hands,jerking of the legs, jumping,and the like.Such movements,like twitchings in general,have a purposive character,and are the expression of a fixed,though subconscious,idea.

Tetany.

Hysterical tetany occurs in paroxysms,which may be provoked by compression of the vessels,nerves, or muscles.Dance has described,under the name of"intermittent tetanus",an affection which Corvisart described under the name of "contracture of the extremities",or "teteny",which latter term has prevailed since it was adopted by Trousseau.In it the patient has a sensation of formication in his hands and feet,afterwards a hesitation,and then an actual impediment in the movements of the fingers and toes.Soon the extremities become stiffened and the patient,although still capable of certain movements,can no longer contend against the contraction,which increases and becomes painful like a cramp,In severe cases the contracture invades the muscles of the trunk and of the larynx,provoking a feeling of suffocation.The fingers are strongly pressed one against the other in the form of the "accoucheur's hand";then they become flexed,and the whole hand becomes flexed upon the wrist.The toes,closely pressed together with the great toe beneath the others,becomes flexed upon the sole of the fot,and the latter becomes hollowed,while the dorsum of the foot is arched,and the heel is raised.The upper extremity may be flexed or extended,but the lower is usuallyextended.

VISCERAL ACCIDENTS.

RESPIRATORY APPARATUS.

Coincident with respiratory spasms are those of articulation, to which they correspond. The former can be divided clinically into the three groups of simple, mixed, and complicated. The simple respiratory spasms, the most frequent, are those in which convulsive twitchings occur exclusively during either inspiration or expiration; the expiratory spasms which cause phenomena more or less analogous to cough, or snorting; the inspiratory spasms which produce noises resembling hiccough, yawning, or sniffing. In the mixed respiratory spasms the movements of both inspiration and expiration are disturbed by the spasm. In the complicated respiratory spasms the convulsive twitchings involve the muscles both of respiration, giving rise to coughing, barking, mewing, howling, bellowing, and other peculiar phenomena. The epidemicity of such manifestations is sometimes occasioned by the influence of contagion; and the hysterical latyngeal noises are often inspired by the imitation of animals which, shortly before the onset of the spasm, have attracted the attention of the patient. As a rule, a paroxysmal character is assumed by the hysterical cough; less frequently, however, it is preceded by phenomena of the aura, and followed by a stage of delirium or convulsion; like other laryngeal noises, it is sometimes continuous, at least during the waking hours. The laryngeal spasms may occur in consequence of a lesion of the air-passages, but they are usually not accompanied by any grave disturbances except fatigue; the dyspnoea and suffocation gave seldom any effects. These spasms are more frequent in girls, and in young persons in general; they are usually of rapid onset, following an emotional disturbance or an attack, and their termination occurs in the same manner; yet, not infrequently, they may continue for months or years. The hysterical stigmata, which often accompany them, enable us to distinguish them from the analogous spasms occurring in the "maladie des tics", or in paramyoclonus multiplex. Coughing, barking, aphonia, and sneezing may alternate in the same individual, and these spasms may also coincide with choreiform movements; chorea and hysteria approach each other closely. Cough, hiccough, sobbing, yawning, sneezing, laughing, etc., may receive special descriptions among the symptoms of hysteria, but all these spasms are of interest only in their general aspects, and in respect to their accompaniments. Briquet has seen astham alternating with an hysterical paralysis; Charcot and Weir Mitchell have seen a rather peculiar form of dyspnoea in hysterical subjects, which was characterized by a very superficial respiration repeated 170 to 180 times a minute, without any anxiety, pain, trace of cyanosis, noise in the chest, or acceleration of pulse. This hysterical increase in the respiratory movements occurs in paroxysms during the day, but ceases during sleep; it is announced by phenomena recalling those of the aura, and after a variable duration of

several hours is terminated by a flood of tears like an ordinary attack.When these crises of tachypnoea appear alone,unaccompanied by any other hysterical manifestation,they may be mistaken,for the time at least,for dyspnoea of organic origin.Hysterical dyspnoea may be accompanied by bronchial secretion,and sometimes by haemoptysis.Sometimes one comes across a case of hysteria in which there are suffocative attacks with haemoptysis,which are caused rather by a vasomotor trouble than by a vicarious congestion of the lungs;for,although haemoptysis may coincide with amenorrhoea,the coincidence is often wanting,and,furthermore,hysterical haemoptysis may be encountered in man.It is often connected with the attacks,occurring at the end of one with a blowing respiration,and a rattling sound in the trachea.The haemorrhage may be more or less abundant,and may coincide with other losses of blood,such as epistaxis or haematuria.Haemoptysis,occurring apart from the attacks,is usually or often accompanied by superficial hyperaesthesias of the chest,usually on the side on which the stigmata predominate.Auscultation enables us to recognize signs of congestion of more or less intensity,and sometimes even pleural irritation.There is nothing peculiar in the character of the haemorrhage, which,as a rule,lacks the frothy character of the haemoptysis of the tuberculous.It is not very uncommon to see neuropathic haemoptysis accompanied by a certain acceleration of the pulse,a slight elevation of temperature,emaciation,and night sweats which simulate tuberculosis.This resemblance may be the stronger in that certain hysterical subjects present more or less constantly,but principally in the morning,a weakness of respiration more marked on the side in which one noticed a predominance of the hysterical stigmata.Sometimes the haemorrhages recur at short intervals,and are very abundant;at other times the blood is coughed up in small amount,and at rather long intervals.The weakness of respiration,referred to above,and more marked on one side, appears in great measure to be due to a paretic condition of the thoracic muscles of inspiration;but paralysis of the diaphragm may also contribute to it;diaphragmatic paralysis has been observed on one side of that structure,it being apparently part of an hysterical one-sided paralysis.Briquet says that he has seen,lasting for several months,an isolated paralysis of the diaphragm,the same being manifested by a very short respiration,a muffling of the voice,and a shortness of the breath, which is increased on the least movement."During inspiration the diaphragm does not contract,but is pushed up into the thorax,and there is then a very pronounced depression at the base of the thoracic cone,and especially in the epigastric region;on the other hand,this part projects during expiration,which is the exact opposite of what takes place under normal conditions". Hysterical subjects may alone suffer from laryngeal affection,the latter consisting of either disturbances of sensibility,such as anaesthesia and hyperaesthesia, or of motility,such as paralysis,contracture or spasm. It is most often anaesthesia which accompanies the motor

troubles,but the spasms are seen in conjunction with hyperaesthesia in certain cases.The ordinary general exciting causes of hysteria may play a part in the production of these laryngeal affections,but local irritation,and affections of the uterus,an organ which is evolutively related to the larynx,are especially active. Hyperaesthesia may provoke a special emotional state, in which the patient is afraid to speak aloud,and contents himself with whispering,which spares the movements of the larynx - the phonophobia of Coën.On account of their complexity,the study of the localization of paralyses of the larynx is often a matter of considerable difficulty.The paralysis is often bilateral,but it may be unilateral,and may be combined with a certain degree of contracture of the antagonists.These combinations produce true symptomatic paradoxes;a paralysis of the dilators of the larynx,which ought to produce aphonia, gives rise instead to an inspiratory hoarseness with dysphonia,while expiration is free,and the voice is unaffectedStill,we most commonly encounter aphonia in association with laryngeal paralyses and anaesthesia. It is characterized by an inability to speak aloud, while whispering,which necessitates the movements of articulation only,is still possible.It is thus very different from mutism,with which,however,it may coincide. Hysterical aphonia is grave only under certain conditions,butit may constitute an annoying inconvenience because of its duration,which may be for weeks or months,or even years.Even when it comes on gradually,and is provoked by a local irritation or lesion,it may disappear suddenly after an attack,or in consequence of some emotional disturbance;under the same conditions also one may observe its return.As a rule,its onset is gradual when it follows an irritation of the larynx or throat,but rapid when it follows an hysterical attack or a shock.The respiration in both its phases remains free,but no sound whatever can be emitted.It is said, however,that some patients can speak in their dreams, or that they can sing.We may sometimes note the coincidence of an anaesthetic area on the skin of the anterior portion of the neck,and the laryngeal mucous membrane is also usually anaesthetic.A laryngoscopic examination will enable us to note the presence or absence of a local lesion,but very often we are left in doubt as to the seat of the paralysis or contracture.It may be necessary to perform the operation of tracheotomy for the relief of the symptoms of threatening suffocation,occasioned by spasm of the adductors of the vocal cords, the same being also attended by more or less intense inspiratory dyspnoea and hoarseness.

DIGESTIVE APPARATUS.

Various digestive disturbances occur in hysteria with great frequency.Gastralgia is rather common in young girls;and gustatory anaesthesias and hyperaesthesias have a lot to do with the hysterical perversions of appetite,such as pica,malacia,etc.,or repugnance to particular articles of food.Pain may follow the contact with all liquid and solid nourishment.These hyperaesthesias may exist alone,or they may be accompanied by

ptyalism.A frequent impediment to the ingestion of food is that caused by spasms of the pharynx or oesophagus, though the same may,but more rarely,be caused by spasm of the masseter or of the muscles of the tongue and lip. Spasm of the pharynx forms a part of the first period of the attack,and it has always been regarded as playing an important part in the origin of the globus hystericus.It is usually intense enough to prevent any attempt at deglutition.A great many hysterics,however,have a spasm under the form of a prodrome for some hours before an attack,and sometimes this forms the only manifestation of the attack.This isolated spasm of the oesophagus occurs ordinarily under the remittent tonic form;but Bouveret has described,under the name of "hysterical aërophagia",a clonic spasm of the pharynx,having for its cause an excessive hyperaesthesia of the muscles of the pharynx.The spasmodic movements follow each other rapidly,under the form of paroxysms,which last for two or three minutes,and are succeeded by a period of calm. Each movement is accompanied by a sonorous sound;and, on auscultation of the stomach and oesophagus,a gurgling noise is heard.From time to time there is an eructation of pure air.Involuntary deglutition of air occurs rather frequently,under the form of spasmodic movements,and it appears to be rather frequently associated with the production of inodorous eructations,tympanitis,and borborygmi.When the patient keeps his mouth firmly closed, the results of this swallowing of air are made clear by the suppression of the eructations and borborygmi.Oesophagismus is a condition which occurs rather frequently in the form of a more or less permanent contracture occasioned by spasm of the pharynx and oesophagus.This spasm may be seen in children,but it is especially frequent in adults,and particularly in women.Like all permanent spasms,it may be produced slowly,in consequence of a local irritation or of one in the neighbourhood, or suddenly following an attack or emotional excitement. Sometimes there is a remittent stage before the spasm becomes permanent.It may occasion regurgitations,oesophageal vomitings,which may be mistaken for gastric vomiting when the spasm is located at the lower part of the tube;when it is located in the upper part,the patient spits out rather than vomits the food which cannot pass the obstruction.When,by a great effort,the bolus is passed beyond the obstruction,it is often actually vomited,which shows that the spasmodic condition is not confined to the oesophagus alone.Sometimes the passage of food by the strictured point occasions the explosion of an hysterical attack.Sometimes certain articles of food can pass the obstruction,while other kinds of food are arrested;this is rather characteristic of hysterical dysphagia.In consequence of the irritation of an hysterical zone,the passage of an oesophageal sound sometimes gives us valuable information concerning the nature of the trouble:it shows that no organic lesion exists, and may even give rise to an hysterical seizure.Nutrition is variously affected,according as the spasm is continuous or remittent,according as it permits the passag of a greater or less quantity of food-stuffs.

When the spasm suddenly relaxes under the influence of of emotional causes or of an attack, the patient's emaciation disappears very rapidly; nevertheless, sometimes death occurs. The spasm of the oesophagus may be associated with that of the stomach. The latter is manifested when food has passed the oesophageal obstruction and is immediately vomited. But gastric spasm may exist alone, being provoked by hyperaesthesia of the mucous membrane of the stomach, which is intolerant of the least contact. It is to this spasm that are due the hysterical vomitings, which are characterized by their frequent repetition and continuousness. Spasm of the pyloric region appears to be active in the production of the cramps of the stomach, which are so common in hysterical patients. This vomiting may be observed at all ages, but it is more common in adolescents and in adults, as well as in women. Continuous, incoercible vomiting may come on suddenly at the conclusion of an attack, or it may be at first intermittent. It occurs only after the introduction of food, is always alimentary, and follows ingestion almost immediately; it is almost invariably painless. It is sometimes complete, or nearly so, nearly all the food being rejected, and emaciation is then rapid. At other times there is a selection of the rejected matters, some articles being retained; or, again, the vomiting is incomplete without selection, not all the ingested food being rejected, and then emaciation is less rapid. But, as in any case we have to do with a remarkably obstinate trouble, which may last for months, marasmus finally sets in, and then death is the outcome. The instantaneousness and painlessness of the vomiting may cause it to simulate that due to organic cerebral lesions. Sometimes, after a period of obstinate vomiting, we see the production of dilatation of the stomach, with all the troubles which are associated with this condition. This dilatation might be compared, as regards its mode of production, to the paralysis by exhaustion which we sometimes see in hysterical subjects. In the pathogenesis of the anorexias it is as likely as not that these paralyses of the muscular wall of the stomach may occasionally play an important part and be primary at the same time. There is sometimes pain with the gastric spasms, the latter being often associated with the gastralgias which are so frequent in women when young, as well as in those approaching the menopause. Some authors affirm the existence of hysterogenic zones in the gastric mucous membrane; at any rate, vomiting, and even severe convulsive attacks, may be occasioned by contact of the food with the mucous membrane of the stomach. On the other hand, one sometimes observes the excitation of gastralgia, but without vomiting or spasms accompanying it. It sometimes occurs at other times than during a meal, being excited by emotions, but more commonly it follows immediately after the ingestion of food. It consists in a sensation of burning, tearing, or crushing, which comes on suddenly, explosive as it were, and which reminds one of the gastric crises of locomotor ataxia. These gastralgias, especially when they are persistent, are accompanied by throbbing in the temples, ringing in the ears, palpitation, a feeling of suffocation,

ovarian and spinal pains,and,in short,most of the painful phenomena of hystero-epilepsy.The gastric crises are grave,as they may cause death by marasmus,not to mention their painful nature.In fact,when these crises are frequently repeated,a progressive emaciation results; and often,notwithstanding the preservation of the appetite,the patients refuse absolutely all food,in consequence of which gradual inanition results.Finally, some patients complain of a sensation as of something creeping about in the stomach - a sort of paraesthesic phenomenon.Hysterical subjects often have haematesesis, and this,though rarely,may be seen in association with the gastralgia described.The vomiting of blood,seen in connection with other hysterical symptoms,appears in consequence of a blow on the epigastrium,or of some strong emotion,or in relatin to an hysterical attack,which it follows,accompanies,or precedes.Haematemesis not uncommonly appears at the period of the menstrual flow, but it has no necessary relation with the latter,and it may occur in man.In general,before it commences,one finds a swelling of the epigastric region,and a certain amount of pain.The latter radiates towards the ovaries or the back,and is accompanied by precordial anguish, pharyngeal constriction,and other variable phenomena of the hysterical aura;then the vomiting occurs,usually without effort,in one or two attacks.The patient often faints.The vomiting may occur but once,or be repeated in a series.The blood vomited is sometimes pure,sometimes mixed with food particles;its colour varies greatly;but,as it is usually vomited immediately after its extravasation,it is rarely clotted or black,as in melaena.The blood is often diluted with a watery fluid, which may be saliva,or a product of gastric secretion. The vomitings frequently occur in the morning.The amount of blood which is vomited varies considerably;when it is abundant a more or less lasting anaemia may result. Sometimes hysterical haematemesis recurs with a certain periodicity.The diagnosis is easily made.A direct examination will enable us to exclude buccal haemorrhage; haemoptysis is accompanied by special symptoms;but it will be difficult to eliminate ulceration of the stomach,- for round ulcer is frequent in hysterical subjects, and the exquisite cutaneous hyperaesthesia in the epigastric region,which is noted in the case of ulcer,may perhaps occur in haemorrhage from vasomotor troubles. In any case,this frequent occurrence of round ulcer in hysterical subjects is interesting to note,for it may lead us to fear death as a consequence of gastric troubles,which one is more accustomed to regard as associated with no gross lesion.The idea that ulcer of the stomach may be the result of a gangrenous process is suggested by the pain which sometimes accompanies cutaneous gangrene.Loss of appetite may be a primary condition,or associated with gastralgia and incoercible vomiting.Under the name of "hysterical anorexia", Lasègue has described a special condition,rather frequently encountered in girls from fifteen to twenty years of age,suffering from more or less definite hysterical troubles.This consists in the more or less absolute

refusal of food,while there is found no digestive trouble to which it could justly be attributed.The loss of taste and sensibility in the digestive apparatus,which are necessarily accompanied by disturbances of secretion,may have a part in its production.The patient complains first of a malaise,of a sensation of fulness or of distress in the stomach,which leads her to diminish the amount of food taken;then,instead of recognizing that inanition has aggravated the trouble,she expresses repugnance to food,and finally refuses flatly to take any nourishment.The disease then follows a fatal course. At the beginning of the trouble,when the patient complains of gastric pains,cramps,or sensation of fainting, pallor,sweats,and the like,but when there is no nausea or vomiting,we may question whether we have not to do with a gastralgia,the cause of which remains to be discovered.Then the mental condition becomes aggravated, and,after some hesitation,the patient seems to have become convinced that there is no hope of relief except in abstention from all food,and she then diminishes gradually the amount taken.The special nervous condition of these patients gives them a peculiar power to tolerate abstinence,and for weeks and months they do not appear to suffer from being deprived of nourishment. They emaciate but little,are in good spirits and lively, and have a constant need to be on the move;indeed,they do not appear to suffer in the least.The result of this absence of general troubles is that the medical attendant is deprived of his authority,in so far that,although the patient may be willing to take the medicines prescribed,she cannot be turned from her determination to take no food,especially as those about her can hardly be made to believe that the condition is a grave one. The anorexia continues to persist.Those about the patient beg and entreat her to take food,and do all possible in the culinary way to tempt her.The excess of insistance arouses an excess of resistance;we may demand, but the patient intrenches herself behind the absence of all suffering.She is as strong and as lively as ever; she maintains a peculiar quietude,a sort of pathological contentment;and she opposes to all an invincible force of inertia.Little by little,this tolerance wears away, the organism becomes exhausted,emaciation becomes more and more apparent and makes rapid progress,the abdominal wall retracts,the skin becomes dry,and the patient grows weak and can no longer stand without vertigo and faintness.Then the quietude of the relatives becomes transformed into very great anxiety.Little has been added to the description of Lasègue,published,in 1873, in the "Archives générales de Médicine".The following year,Gull recalled the fact that he had recognized this condition six years before,which he had described under the name of "nervous apepsia".He relates a certain number of interesting facts,and especially the possibility of the existence of this peculiar anorexia unassociated with any other hysterical trouble.The affection may be seen in men.He proposed the name of"nervous anorexia", which term was accepted by Charcot.Furthermore,he insisted on the weakened state of the respiratory and circulatory functions,and reports a case in which the pulse

fell to fifty, and the respurations to twelve in the minute. Gull mentions also the possibility of a certain lowering of the temperature, and he deduces from this a therapeutical indication. Instead of a slowing, Dowse recorded an acceleration of the pulse, which beat one hundred and twenty to the minute; and he described the change taking place under the influence of treatment, that is to say, a patient, so emaciated as to present a senile appearance, regained, within a few weeks, her former appearance of youth. The experiments of Charcot show that animals in a state of extreme emaciation can no longer digest without the help of external warmth. Gull propsed to warm the vertebral column with a large rubber tube filled with hot water. Death may take place from syncope, from the excessive weakness, or from tuberculosis, the existing malnutrition favouring the course of the latter. The relatives and friends make very undesirable attendants on the patient: the latter should be subjected to forced feeding and isolation - especially the last-mentioned. Even when the anorexia is accompanied by nausea and vomiting, the forced feeding may be useful, for food introduced through the tube may be retained when that which is swallowed may be immediately rejected. Relapses are not rare, and each new attack is, as a rule, more grave than the preceding one, if we do not, at the very first symptoms, have recourse to isolation. With the anorexia there may be mental perversion. At the beginning we often observe a more or less marked agitation, frequently persisting to an advanced stage of the condition, manifested by an incessant need to walk, and to exercise to a most fatiguing degree. Many patients compress themselves to an excessive degree, not only with the corset, but often with bandages, and with belts placed immediately on the skin. Many take a pride in being thin, and consider this condition attractive, even when it has progressed so far that the skin of the hands has lost its elasticity and remains in folds when it is pinched up, and when the face has assumed an earthy hue, and becomes seamed with wrinkles. Sollier says that these patients are affected with illusions, especially visual ones, such as macropsia, under the influence of which the food that is presented to them seems in too great amount. Hysterical persons frequently suffer from intestinal troubles, such as the spasms, which I have elsewhere described, and which are manifested by borborygmi. But disturbances of motility of the intestine manifest themselves most frequently under the form of paralysis, which occasions a more or less generalized meteorism. This condition, which is sometimes called "hysterical tympanitis", is often accompanied by enteralgic pains, or colic. The name of "peritonism" has been applied to the painful phenomena which accompany tympanitis, and which give rise to symptoms of general reaction simulating peritonitis. The ordinary exciting causes of hysterical phenomena may give rise to general meteorism, or it may arise very suddenly, either during the attack, or after it; at other times its progress is slow. As a rule, the abdomen is uniformly larger than normal, but the tension of the recti muscles may give it a bilobate form. The skin is

often exceedingly sensitive,while deep pressure is better borne.Percussion usually gives a tympanitic sound, except when the distention is very great,in which case we may obtain absolute flatness,just as in cases of tympanitis of other nature.When the distention is considerable,there result mechanical disturbances of the pulmonary and cardiac functions,which may threaten asphyxia. The rapidity of the appearance of meteorism,and its equally rapid disappearance under certain circumstances, may be explained,in part at lest,by a paralysis of the muscles of the intestine,which do not resist the pressure of gas,while the sphincters do resist it.The reduction of the meteorism,under the influence of chloroform anaesthesia,might be explained by a gradual relaxation of the sphincters,allowing the gas to escape insensibly. Some have endeavoured to explain the meteorism by an instantaneous production of gas. This is not at all proven by the fact that Brodie was able to abstract gas by the rectal sound,and noted that the patient floated in the bath;but neither can it be denied because of the absence of an audible elimination at the moment of the disappearance of the swelling.The ordinary coincidence of constipation and retention of urine with the meteorism may show that,in offering an obstacle to the insensible elimination of gases,the contracture of the sphincters plays an important part.The insensible elimination of the gases of the intestine is a physiological fact,and is effected by the relaxation of the sphincters,under the influence of some emotion or of choloform anaesthesia.The patient may suffer for weeks or months from the hysterical tympanitis;and it may also be of short duration,especially when it is related to convulsive or emotional attacks.When it has occasioned a very great enlargement of the abdomen it may cause cracks with permanent cicatrices,just as other prolonged distentions do. As a rule,however,its disappearance is rapid.The presence of an acute peritonitis is sometimes suggested by the occurrence of acute pain,vomiting,and an altered expression with the meteorism.A differential diagnosis could then only be based upon a knowledge of pre-existing hysterical symptoms,and especially would this be our only resource if nervous fever were also present.The latter, however,is of very rare occurrence.In hysterical meteorism the administration of chloroform may instantaneously relieve the distention of the abdomen;but this is a diagnostic measure which might not be wholly inocuous if the case were one of acute peritonitis.When the distention is extreme,and the percussion note is dull,meteorism may be mistaken for a cystic tumour of the ovary; and the disappearance of the tympanitis under the influence of chloroform is the only distinctive sign.The resemblance to these phantom tumours may be especially striking in the case of localized pneumatosis.The nature of localized meteorism is rather obscure;but we can hardly understand how this condition could be the result of spasm of the muscles of the abdominal walls,and we therefore arrive at a theory of localized contractures of the intestinal muscles,by a process of exclusion. The existence of these localized contractures is the

more probable,since,coincident with meteorism in hysterical subjects,phenomena of internal strangulation, with stercoraceous and bloody vomiting,have been observed.The fact that fluid introduced by enema has been, shortly afterwards,passed by the mouth,shows that stercoraceous vomiting may occur without obstruction,in consequence of a reversed peristaltic action of the intestine.Sometimes hysterical meteorism resembles tuberculous peritonitis;and,in the absence of stigmata, might easily be taken for it,especially as tuberculous peritonitis frequently exists without thoracic troubles. Any part of the abdomen may be the seat of phantom tumours,but,as a rule,they are located in the uterine region.When in the hepatic region,and associated with hyperaesthesia of the overlying integument,colic of hepatic origin may be suggested,the more so if jaundice exists.Hysterical subjects are frequently troubled with diarrhoea;it alternates often with other symptoms, and may,and usualy does,occur in crises.There is sometimes no apparent cause for it,and its sudden onset may be very striking.Pregnancy may be suggested by the association of meteorism with vomiting and suppression of the menses,and,at the time of the normal termination of pregnancy,we may observe pains akin to those which are experienced in labour.When the idea of pregnancy is accepted by the patient,the early symptoms are soon accompanied by other phenomena,such as a secretion of milk, and a peculiar emntal condition,which may continue even after the limits of a normal pregnancy are exceeded. Obstinate constipation may be caused by the loss of the muscular tone of the intestine;but hypersecretion of the latter may lead to an alternation of the former with diarrhoea.Paralyses or contractures may be observed in connection with the sphincter ani.It is,however,seldom that we find involuntary evacuations due to paralysis and anaesthesia of this part.Spasm - which is often provoked by local irritations,such as fissures,and which is usually associated with cutaneous hyperaesthesia,is less rare.It frequently coincides with urethral spasm.

URINARY APPARATUS.

The urinary system may present in the hysterical a variety of troubles:the disturbances of the urinary secretion have already been noted above.Wandering kidney is sometimes associated with other disorders,and may be regarded as a stigma of degeneration.Among the disturbances of sensation may be mentioned renal neuralgia,which may be mistaken for nephritic colic,with radiating pains and haematuria.The possibility of this haematuria,which occurs under the form of more or less prolonged paroxysms,has long been recognized by good observers.It may occur apart from the renal crises;the painful paroxysms excited by floating kidney are favoured by an hysterical soil.It has been shown that a manifestation of hysteria,frequently connected with alcoholism,is polyuria:it may occur independent of attacks,and be more or less permanent in character.The onset of hysterical polyuria may be rapid or gradual;the affection often follows some excess,any emotional storm,or a traumatism.The influence

of suggestion may sometimes, especially when the polyuria is the only symptom, diminish it. The amount of urine passed, and the frequency of micturition, are exceedingly variable; fifteen, or even twenty-five, may be passed in the twenty-four hours. The abundant secretion and frequent micturition lead to insomnia, as well as a peculiar neuropathic state, so that a psychical pollakiuria is soon added to the mechanical pollakiuria. The only chemical characteristics are an increase in the chloride of sodium; the phosphates are usually of normal proportion, the urea varies with the diet, and there is neither sugar nor albumin. The urine is clear and limpid. Such patients are, as might be expected, very much troubled with thirst. But, although the mouth is rather dry, as a rule, the tongue preserves its normal colour; we do not see the blackish coating, or the dental caries, so frequent in diabetic patients. The thirst, when it is very intense, tends to increase the insomnia, and the condition of prostration resulting. The arterial tension is increased by the amount of liquid imbibed. In spite of the amount of food eaten, the patients rapidly emaciate; they are very apt to become addicted to alcohol. Men are more frequently troubled with this polyuria than women, and its gravity resembles the other manifestation of hysteria in the former class. The affection is subject to recurrences, and is very obstinate to treatment. It is remarkable how slight causes may occasion its return, once it has been got under control. The diagnosis may be based upon the history of the case, and upon the neuropathic accompaniments; upon the mode of onset and the remissions; upon the absence of the signs of diabetes mellitus; upon the possibility of cessation under the influence of hypnotic suggestion, and suggestion in the waking state. The prognosis is rendered more grave than it otherwise would be in consequence of the hypochondriacal preoccupations which accompany it. It was for long doubted whether an hysterical ischuria or anuria could exist, for the reason that the condition often coincides with vomiting, which has led writers of authority to regard the phenomena as a vicarious excretion of urine; and because, on the other hand, in several cases, and especially in the well-known case of Nysten, it has been possible to detect simulation. The cases of Laycock, however, are worthy of credence; but it especially to Charcot that hysterical anuria that the credit is due of having satisfactorily described the affection. It appears that a patient, whom he had watched for several years at the Salpêtrière, served to deminstrate, under favourable conditions for observation, the reality of ischuria, the coincidence of vomiting, the abundance of which varied inversely with the amount of urine excreted, and the existence of a certain quantity of urea in the vomited matters. Grehant, who observed this last-mentioned fact, was unable to find more urea in the blood than under normal conditions. The history of hysterical ischuria is closely bound with that of vomiting. The ischuria may be temporary or permanent. Temporary and isolated ischuria often passes unperceived, and may hardly attract the attention of the patient. It often follows a convulsive or other paroxysm. Permanent ischuria

be accompanied by vomiting,diarrhoea,salivation,profuse sweats,and other compensatory phenomena;or it may occur alone.The ischuria may be secondary to vomiting,or primary,and it is not improbable that both troubles may develop simultaneously.Ischuria,-the cure of which is sometimes retarded by an habitual anorexia,-- associated with vomiting,may continue for months;the latter,indeed, causes disturbances of nutrition and emaciation,but everything tends to return to the normal as soon as the excretion of urine is re-established.The circumstances under which the hysterical woman ceases to pass urine are various.At the end of twenty-four hours she becomes uneasy;a catheter is passed,but nothing is found in the bladder,and the latter also,as fara s one can judge from palpation,is not disturbed.At the end of two or three days,if the anuria is complete,one observes the occurrence of vomiting,either spontaneous or provoked by the ingestion of food,no matter in how small a quantity.It has not been shown that the vomited matter has even the odour of urine,or that the vomiting may be truly regarded as supplementary to the suppression of the urinary secretion.The matters contain urea,as do,moreover,all vomited matters.In general,however,the amount of vomited matter increases in proportion as the secretion of urine diminishes.Sometimes the vomiting is replaced by diarrhoea or sialorrhoea.It would appear as though there were a supplementary elimination of the fluids,if not of the solid constituents of the urine.Ischuria,associated with vomiting,may continue for months,and be very obstinate, as has already been noted.The anuria does not always give rise to the expected symptoms,even when it continues for a fortnight or so:of this fact I have had proof in my own practice.The suppression of the urinary secretion,however,in the majority of cases,gives rise to headache,nausea,visual disturbances,and dyspnoea,which become gradually worse the longer the anomaly exists. The disturbances of urinary secretion may give rise to vesical troubles.Hysterical patients may suffer from pains in the bladder,either permanent or recurring in paroxysms,or permenent with paroxysmal recrudescences, and often in relation with uterine neuralgia and dysmenorrhoea.Pain in the bladder may simulate the presence of a stome in that organ;and when its neck is affected there may be retention of urine.The neuralgias of the bladder are often associated with hyperaesthesia of the vesical mucous membrane,as determined by pressure on the abdomen,or by means of the introduction of a sound.This hyperaesthesia is sometimes sufficiently intense to be a point of departure for an attack when the mucous membrane has been mechanically irritated,and it causes a continual desire to micturate.Distention occurs,sometimes resulting in paralysis,when contact of the urine with the anaesthetic mucous membrane no longer causes a desire to urinate..This retention of urine is accompanied by incontinence from overfilling,unless care is taken to empty the bladder with the catheter.Incontinence, which is rare during an hysterical attack,may be due to the walls of the bladder being in a state of permanent spasm,or associated with a spasmodic paraplegia.Retention is often temporary,but it may continue for some time,

even for months or years,being then complicated with incontinence if we do not resort to catheterization. When retention is chronic the urine may become altered, and we may then see the ordinary consequences of this accident.Recovery may be sudden,however long the condition has lasted,and very often relapses occur,while death has been known to carry off the patient.Urinary retention is said to be more frequent than incontinence; the two conditions may alternate.It may be due either to contracture of the neck,or to paralysis of the neck, of the bladder.The introduction of a catheter will serve to differentiate the condition.Exploration by the catheter is the more useful,as the retention may coincide with ischuria.Inconvenience in micturition may be caused,in men,from anaesthesia of the urethra;the same structure, in the same class of persons,may be the subject of very great irritability,and also of painful or painless spasmodic stricture.The sound,on passing into the deeper parts of the urethra,may excite convulsive or lethargic attacks.

GENERATIVE SYSTEM.

Hysterical men have a comparatively poor genital sense,and hysterical women are really far from being so erotic as many authorities have affirmed.This impotence is,in both sexes,the cause sometimes of acquired sexual inversion,as well as of numerous perversions.The general and special sensibility of the genital organs may be disordered.In women the uterus,as well as the ovaries, may be the seat of a neuralgic condition,with pain radiating in varius directions.These pains are usually permanent,with paroxysmal exacerbations.The mucous membrane of the vulva and vagina may be the seat of anaesthesia or hyperaesthesia,the latter being often associated with spasm of the sphincter ani and vaginismus.In the case of men,the testicles are frequently the seat of hyperaesthesia,and pressure on them,as on the ovaries, may excite a convulsive attack.More rarely the testicles are anaesthetic,and pressure on them does not excite the usual testicular sensation.Sensory troubles of the testicle often coincides with anomalies of size,location, and direction;most frequently the testicle is small, sometimes it is arrested at the ring,and sometimes it is inverted,with or without an anomaly of the epididymis.

D I A G N O S I S.

Many of the diagnostic problems likely to be encountered have already been discussed under the heading of symptomatology,the latter also including the complications and the sequels of the malady.If we have to

do with fully developed cases,have an opportunity of watching a considerable portion of its variable career, and especially the mental symptoms,there is,in general no difficulty in effecting a diagnosis.The stigmata of hysteria are so constant and consistent in most cases that careful search for these will usually reveal the presence of one or more,such as anaesthesia,contracture, perversions of various special senses,and the like phenomena.It is advisable not to begin the investigation of a case with the idea of fraud and imposture;and, although many of the manifestations in hysterical patients are downright frauds,these are,as a rule,the outgrowth of the disease.In many cases the diagnosis is difficult,especially when there is also present some organic disease.Many cases of brain tumour have been recorded in which the symptoms of organic disease were masked by the conspicuous hysterical symptoms;tumours, as large as a hen's egg,have been found in hysterical patients after death,and in the brain,the growth of same never having been suspected during life,when the symptoms were those of the hysterical affection itself. Careful and frequent examination of the eye-ground and enquiry as to pain in the head,vomiting,and local palsies will usually prevent the mistake being made of overlooking a brain tumour.When the question is between hysteria and an organic cerebral lesion,the history of the case will usually aid in the diagnosis.The existence of anaesthesia,and its distribution,are also characteristic of hysteria.In organic paralysis the reflexes are greatly exaggerated,and there may also be clonus. In hysteria the knee jerks may also be exaggerated,but clonus is rare,and when present it is slow and halting. In cerebral syphilis the diagnosis is more difficult, as the paralysis may come and go,and there are usually some psychical peculiarities resembling those of hysteria;but the history of the primary lesion,and the presence of lesions of the skin and bones will usually point to the nature of the disease.Hysterical paralysis is seldom as complete at any stage as that of organic origin.Hysterical paralysis is more liable to occur on the left side,while hemiplegia from haemorrhage or embolism is more frequent on the right.In paraplegia of hysterical origin,there is likely to be rigidity of the legs in extension,and anaesthesia.In organic diseases of the cord there are bed-sores,muscular atrophy,and incontinence of urine.In poliomyelitis,there is wasting of the muscles of the limbs rapidly,and loss of contractility to the faradic current is invariably present. When in doubt as to the nature of the disease,the question can almost always be present by anaesthetizing the patient.The anaesthetic should be pushed rapidly,so as to produce the stage of excitement and resistance.If the case is one of hysteria,the patient,while in a state of intoxication,will often snatch the towel from the face with the hand which had been before helpless, or will throw about with activity the legs which had hitherto been apparently powerless.In a case of hysterical paraplegia following removal of the ovaries,which appears in the literature,the patient's legs were

anaesthetic from the hips down,and she was unable to move them in the smallest degree.Irritation of the sole of the foot,or attempt to flex the leg,would bring on a violent tremor of the limbs,which lasted for several minutes.There was grave doubt as to whether there was not myelitis,for there was incontinence of urine,and a distinct bed-sore formed over the sacrum.The presence of several hysterical stigmata aroused suspicions as to the nature of the case,and an anaesthetic was given to to patient.When partialy under it,she became quite active in the use of her legs,which were thrown about with greatenergy in every direction.One should study every case thoroughly,and not be too hasty in forming a diagnosis.The sex and age of the patient are always to be taken into consideration in forming an opinion, but it is important to remember that hysteria does exist in men,with the typical anaesthesias and other stigmata of hysteria.In spite of one's best efforts, mistakes are frequently made,and one should bear in mind that organic disease often exists coincidently with hysterical manifestations.Provided one carefully studies the phenomena of the attack,there is little likelihood of falling into the error of mistaking epileptic convulsions for the grand attack of hysteria: above all the mental attitude of the patient should be taken into consideration.Furthermore,in epilepsy the attack is sudden;there are biting of the tongue,and complete unconsciousness.The attack seldom lasts more than a minute or two,and the patient usually sleeps profoundly as soon as the attack is over.In hysteria the attack usually comes on gradually;the movements are more violent,the patient throwing herself about,and assuming the various positions of opisthotonos,and the like,which have been described above.The patient does not bite the tongue,and it is usually found that the conjunctivae are sensitive,so that,when the eyeballs are touched the eyelids contract.The changeableness of the symptoms of hysteria are characteristic;there may be anaesthesia one day,and paralysis the next.Finally, an hysterical attack is of longer duration than an epileptic attack. It is a very common thing to confound hysteria and neurasthenia;both conditions may exist in the same patient,but as often they do not.They are quite different diseases,and each has a distinct array of symptoms.Neurasthenia is essentially a disease of nutritional defects.The patent is usually thin and anaemic; there are feebleness of body,bad circulation,and lack of energy.Hysteria is essentially a psychosis.In it there are present globus hystericus,anaesthesia,ovarian tenderness,and paralysis.Neurasthenia occurs as often [illegible] Neurasthenia never begins [illegible] woman, [illegible] often does so.

P R O G N O S I S.

In general, the prognosis, so far as life is concerned, is favourable, the outlook being, of course, qualified by many of the points detailed in the section on symptomatology. Instances of a fatal issue of the disease (from suffocation in consequence of spasm of the glottis, or in coma after severe convulsive or cataleptic fits, or from exhaustion after conditions of intense excitement, of an acute or chronic character, and so forth) are so extremely rare that, in the case of hysterical persons, be unconcerned with even such symptoms as must awaken the gravest anxiety when they appear as the result of other diseases. This applies, for example, to the marasmus which sets in after persistent hysterical vomiting mor after repeated haemorrhages, as also to the profound syncopies which sometimes make their appearance in patients, with or without fits, and so on. Nevertheless, we must always remember the possibility of a fatal issue in such cases. The prognosis, as to life, is obviously rendered unfavourable in the face of the existence of other diseases in whose train hysteria first arose. However, the complete recovery from hysteria (pure and simple) is just as rare as fatality. Even when recovery has apparently taken place, it is, as a rule, observed that the slightest cause is sufficient to reproduce the disease. In this respect, the prognosis appears most unfavourable in those cases in which the tendency to the disease is congenital, and in which symptoms of it first appeared in childhood. In such cases, an exaggeration of these may usually be predicted to occur during the period of puberty, although it is true that after the termination of this period considerable remissions sometimes take place. But there likewise then occur further exacerbations, which cannot always be distinctly referred to particular exciting causes. The last hope of such patients is the age of decrepitude, but again, it is just the period of involution which frequently induces exacerbations, and gives an impetus to the more inveterate forms of mental troubles, which same are absolutely unfavourable so far as their outlook is concerned. In those cases in which the tendency to hysteria, and the disease itself, have been acquired from demonstrable physical ailments amenable to treatment, the most favourable prognosis can be given. A persevering treatment is most frequently rewarded, particularly when the causes are states of exhaustion from severe maladies, or after great, but not persistent, haemorrhages; also when hysteria has been induced by affections of the genitals, the cure of which is possible, or by conditions which are in themselves of a transitory nature, as in many cases of chlorosis. If, on the other hand, if the casual diseases are themselves of a chronic and incurable nature, if they do not also threaten the life of the patient, the prospects of curing the hysteria are bad. But even in cases in which the fundamental ailments can be removed, and in

which there is no congenital predisposition,we must not be too sanguine in our expectations.It is frequently possible to get rid of the more acute and grave symptoms of the disease;but the tendency to further outbreaks remains implanted in the nervous system,and comes into play again on every opportunity.It is frequently observed that the altered condition of the nervous system continues,even when the cause which induced it no longer exists.This is true also of cases of hysteria caused by powerful psychical excitement.They do not by any means always justify the favourable prognosis,which we might expect from the short duration of the injurious influence.On the other hand,it sometimes happens that by simply isolating the patient,or by using suitable moral and physical treatment,the forms of the disease which arise purely from psychical infection are rapidly cured.With regard to the intensity of particular stages of hysteria,the prognosis differs from that of its progress as a whole,as also from that respecting individual symptoms of the disease.I have already repeatedly dwelt upon the unexpected remissions which may occur after the long continuance of apparently grave symptoms.Such remissions take place,in cases of both congenital and acquired hysteria,sometimes without evident cause,and,again, in consequence of moral influences of the most varied description;at other times,these remissions are to be attributed to the fact that the cure or improvement of the physical diseases,constituting the basis of the hysteria,follows by natural or artificial means.Under certain circumstances,these remissions may be so complete that it is with difficulty we can recognize the continuance of the disease,or first observe it by the reappearance at a later period of exacerbations,unexpected and without sufficient external cause.Sometimes,however, considerable exciting causes are required to light up an attack in cases in which merely the predisposition to hysteria exists.It is possible for cases of attacks of ordinary insanity,which make their appearance in some cases of hysteria for a longer or shorter period,to recover completely.Still,the psychical weakness so induced can scarcely ever be got rid of.Of the particular symptoms deeply rooted and persistent psychical disorders afford the most unfavourable prognosis.Transitory phenomena of this kind,even when they are not very violent,may remain without any greater significance for the further progress of the case.If the signs of moral perversity are once distinctly pronounced in their development,or if fixed erroneous ideas have formed,a complete restoration is almost never to be expected. In the purely melancholic conditions of the hysterical - if such have not already played a prominent part in the active development of the disease,and thus become an incurable habit - this is more likely to occur.It can almost never be predicted what symptoms of hysteria will yet transpire in the course of a given case,although ground for surmise in this respect is sometimes afforded by the frequency of certain combinations,such as paralysis with anaesthesia,spasms with increased sensibility to pain,etc.Even when they have existed

never so long,or been repeated never so often,the individual sensory and motor symptoms,both alterations of circulation and those of secretion,are collectively capable of recovery.It cannot positively be predicted of any one of them whether it will disappear or persist;but one usually finds that,if the same symptom repeatedly shows itself,it becomes more obstinate,and later on can no longer be removed by the same means as on its first appearance.

T R E A T M E N T.

P R O P H Y L A X I S.

The importance of preventing the occurrence of hysteria in one predisposed in any way to it is too obvious to require emphasis.In view of the rarity of complete cures of the disease,when once it has fully developed,it is of prime importance to combat and impede its small beginnings,lest from a condition of hysterical predisposition the malady itself should be evolved. Such an influence is chiefly possible in childhood and youth;but one is,as a rule,consulted when the evil consequences of a defective regimen come to light,and we have already to treat no longer the tendency,but the disease itself.If one has an opportunity of giving timely advice in cases of congenital predisposition,we must treat in accordance with the indications,which have already been mentioned in discussing the etiology,that is,insist upon the avoidance of educational defects which notoriously assist the development of hysteria. As physical debility so often exercises an injurious influence in this respect,it must be combated by all the means at our command.Diet is especially to be superintended,and we must take care that the children only receive sustaining and easily assimilable nourishment. The unlimited indulgence which some parents exercise in this respect merely leads to this,that children constantly upset their stomachs with dainties,and generally acquire a repugnance to all wholesome and nutritious food.States of exhaustion and marasmus in a high degree, and a host of hysterical symptoms,sometimes develop in this manner at an early period,which one may rapidly diminish,if it be possible to gain so much authority over a child that it will submit to a rational regulation of its diet.It is no less important in such cases of threatened effeminacy and weakness to attend to the hardening of the body against influences of weather, and to their becoming used to muscular exertion.Regular exercise in the open air,cold baths in summer,swimming,gymnastics,and the like,must be very strongly recommended for such children,while allowing them to sit still in the house for any length of time,and anxiously shielding them from every draught and from all exertion in any degree unconfortable,must be considered to be highly dangerous.Particular care must also be taken that

the timidity and anxiety so often present in neurotic children be removed,and that they accustom themselves to suppress such emotions,and to overcome their fear of certain animals,of remaining in dark rooms,of being alone,etc.Furthermore inuring oneself to physical pain is in itself a procedure tending to robustness of body, and might be commended to certain hysterically disposed. Notwithstanding the obvious importance of these principals,it is not superfluous to give warning that the proper limits be not overstepped in such a case,as we so frequently find they are;the hardening process is carried on with a species of fanaticism,which,disregarding the powers of endurance of the individual in question, saps his strength instead of promoting it.It is just these nervous children of whom I am speaking who are so often weakly out of doors;if they are now incited to exertions to which they are not equal,the consequent exhaustion is the greater,and the self-confidence disappears,instead of increasing.If the are,notwithstanding, forced by threats and punishment to attempt what they cannot accomplish,one is the more certain to produce natures timid,anxious,and irresolute,and therefore quite under the control of their feelings.People must equally be put on their guard against accustoming children suddenly,and by violent means,to frights and surprises. Various cases are known in which just by such attempts (as,for example,suddenly leaving them alone in the dark, or forcing them to touch animals of which they are afraid,and so on) the hysterical predisposition has been confirmed,or the outbreak of severe symptoms actually induced.An influence upon the mental has,in the main, to be exerted according to the same principles as upon the physical developmentHere,too,we must take into consideration aright the individual to be dealt with,and avoid extremes.Moreover,it is specially important in this case to avoid the evil consequences of too great endeavours,such as are urged in part by ambitious teachers or parents,and which are in part also made by nervous children of extraordinary intellect.At the period of puberty all these regulations for education are of great importance,as at this time many injurious influences come into operation which further the development of hysteria.At this period,indeed,it is often too late to combat effedtually the seeds of the disease,which have been already firmly implantedNothing further has to be added to what has been said as regards the appropriate physical and mental training at the period of puberty,except that we must avoid allowing children to leave childhood too soon,and that we must carefully strive against the tendency to fancifulness and abandonment to fantastic ideas so frequently met with at this time.Further inferences to be drawn from these principles are self-evident.Finally,particular attention must be paid to the chlorosis which frequently makes its appearance in girls at this age,and which is to be treated on general principles.Regarding the prophylaxis of hysteria in adult life,little can be said in particular. Such measures are principally to be taken into consideration when a tendency to hysteria has arisen in consequence of physical diseases or physical excitement,or

even when the disease itself has already broken out, but again disappeared, the tendency to a fresh attack merely remaining. In such cases the same rules, on the whole, are to be considered as in the treatment of the disease itself. We must also consider here the advice frequently given, that girls in whom a tendency to hysteria exists ought to marry early, as well as the seeking the welfare of nervous women generally in marriage, that is, in sexual congress. In some cases good may be thus effected, presuming that the marriage is a happy one, and does not in itself carry the elements of such influences as favour the development of hysteria, and presuming, further, that we have to deal with individuals physically strong, full-blooded, and already perfectly developed. Much more frequently, however, is this injurious than beneficial, and it is positively objectionable to advise early marriage in the case of delicate, weakly girls, who are anaemic, and in whom the entire physical development is retarded. Even when matters progress favourably at first, we observe almost regularly in such cases that the influences of pregnancy and delivery overtax the existing powers, so that the very symptoms which we had hoped to avoid actually occur.

TREATMENT OF THE FULLY DEVELOPED DISEASE.

Of all plans available, the moral and psychical management of hysteria is of more importance than any other method of treatment, and must, therefore, be always considered. The basis of this method of cure is to rouse the will. It is essential to establish faith in the mind of the patient. She must be made to feel that not only can she be helped, but that she will be. Every legitimate means must also be taken to impress the patient that her case is fully understood. If malingering, or partial malingering, enters into the problem, the patient will then feel that she has been detected, and will conclude that she had better get out of her dilemma as gracefully as possible. The will is, as it were, unchained by such faith, which is also an important stimulant and tonic to the mental faculties. Remarkable, and sometimes outrageous, methods of treatment have been at times adopted by medical practitioners who have entertained extraordinary ideas regarding the pathogenesis of hysteria. They forthwith conclude that a woman with hysterical symptoms is nothing but a fraud. They are much inclined to assert their opinions, not infrequently to the patient herself; and, if not directly to her, in her hearing to other patients or friends, relatives, nurses, or physicians. They threaten, denounce, and punish, - the latter especially in hospitals. In general practice the wholesome restraints which the peculiar financial and other relations of patient and physician enforce usually modify their course. In spite of the fact that persons suffering with hysteria not infrequently do simulate and are guilty of fraud, it must be borne in mind that some hysterical manifestations may be, for the time at least, beyond the control of patients. Even for some of the frauds which are practised the individuals are not responsible, because of the weakness of their moral nature, and their lack of will-power. Moral treatment, in the form of reckless harshness,

becomes immoral treatment.The liability to mistake in diagnosis,and the frequent association of organic disease with hysterical symptoms,should make the physician careful and conservative.In spite of the fact that an occasional cure,which is usually temporary,is effected by denunciation,and even by cruelty,is not a good argument against the safe position that the medical attendant should not show his hand.Only after due consideration,and by a carefully-planned method,should harsh measures be adopted;and these measures should never be used purely as a punishment.A good plan sometimes is, after carefully examining the patient,to place her on some simple,medicinal,and perhaps electrical treatment, taking care quietly to prophesy a speedy cure.If this does not work,in a few days other severe or more positive measures may be used,perhaps blistering,or some strong electrical currents.Later,but in rare cases only, after giving the patient a chance to arouse herself by letting her know what she may expect,painful electrical currents,the hot iron,the cold bath,or similar measures may be used.It is sometimes useful to resrt to the method of neglect.Wilks mentions the case of a schoolteacher with hemianalgesia,hemianaesthesia,and an array of other hysterical symptoms,who had gone through all sirts of treatemtn,and at the end of seven months was no better.The medical attendant simply left her alone. He ordered no drugs,and regularly passed by her bed.In three weeks he found her sitting up.She talked a little, and had some feeling in her right side.She was now encouraged,and made rapid progress to recovery.Neglect has aroused her dormant powers.This is a method of treatment which,according to the tact and intelligence of the physician,may fail or succeed;and it can be carried out with more prospects of success in a general hospital than in private institution or at the home of a patient. The consideration of the subject of the so-called"faith cur" and "mind cure" is one of considerable interest. One difference between the faith cure,as claimed and practised by some of its advocates,and by those who uphold it from a scientific standpoint,is simply that the latter do not refer the results obtained to any supernatural or spiritual agency.I would suggest that the power of faith be exercised in a legitimate way to its fullest extent,and do not advise the establishment of prayer-meetings for the relief of hysteria.A case in point is that in which a young lady is sick,and for two years is seen by all the leading physicians in London; a clergyman is asked in,and prays over her,and she gets up and walks.The doctors all join in,and say the case was ne of hysteria - that there was nothing the matter with her.Then,says Wilks,"Why was the girl subjected to local treatment and doses of physic for years? Why did not the doctors do what the parson did?"An attempt to reduce the therapeutic use of mental influence to a practical,working basis is made by Tuke (Influence of Mind upon the Body),who holds that hypnotism may be used in a very few cases,and that combined mental and physical procedures may sometimes be employed.It is often important and justifiable to inspire confidence

and hope in hsyterical patients by promising cures when it is possible to achieve cures;and a physician may sometimes properly avail himself of his influence over the emotions of the patient in the treatment of hysterical patients,but always withlgreat caution and discretion.Every effort should be made to excite hysterical patients to exert the will;and,according to Tuke,in some hysterical cases it is advisable to systematically direct the attention to a particular region of the body, arousing at the same time the expectation of a certain result.A studdy of such a craze as the so-called mind cure thoroughly exemplifies,if it does nothing else, the importance of the employing mental impression.Not a few people,of supposed sense and cultivation,have pinned their faith to this hobby.A glance at the writings of the apostles of the mind cure will shw at once to the critical mind that all in it of value is dependent upon the effects of mental impression upon certain peculiar natures,some of them being of a kind which afford us not a few of our cases of hysteria.Evans (The Divine Law of Cure) has published several works upon the subject,from which,however,it is not easy to obtain some ideas as to the basis of the mind-cure treatment. It is claimed that the object istoconstruct a theoretical and practical system of phrenopathy,or mental cure, on the bass ofthe idealistic philosophy of Berkeley, Fichte,Schelling,and Hegel.Evans says that it must be a malady more than ordinarily obstinate that it is cured or relieved by it.The fundamental doctrine ofthose who believe in the mental cure is,that to think and exist are one and the same,and that every disease is a translation into a bodily expression of a fixed idea of mind. If by any therapeutic device the morbid idea can be removed,the cure of the malady is assured.When the patient is passive,and consequently impressible,he is made to fix his thoughts,with expectant attention,upon the effect to be produced.The physician thinks to the same effect, wills it,and believes and imagines that it is being done; the mental action to the patient,sympathizing with that of the physician,is precipitated upon the body,and becomes a silent,transforming,sanative energy.

Drugs are used in nearly every case of hysteria; though they alone cannot cure,one must use them.When they are properly used,they may have a moral or mental, as well as a physical influenceAmong those which have been most used,from before the time of Sydenham up to the present day,chiefly fortheir supposed or real antispasmodic virtues,are galbanum,asafoetida,valerian, castor,and musk,opium,and hyoscyamus.The value of asafoetida,valerian,castor,and musk is chiefly of a temporary nature.If these drugs are used at all,they should be given in full doses frequently repeated.Sumbul appears to have a calmative effect,and can be given in the form of the tincture or fluid extract - from twenty minims to half a drachm of the latter,or one to two drachms of the former.Other drugs are seldom required in hysteria,except to fulfil the indications which may arise.It is an incontrovertible fact that there is no drug which is a specific in hysteria.Chloral,bromides,

and the coal-tar preparations should be avoided,as they are positively harmful.Opium is especially to be avoided, except in some very rare cases.Dujardin-Beaumetz says it is mainly useful in the asthenic cases.Occasionally, in a case with sleeplessness or great excitement,it may be absolutely indispensable in combination with some other hypnotic or sedative.The danger,however,in other cases of forming the opium habit should not be overlooked.In the continuous treatment of hysteria,the metallic tonic are,of all drugs,to be preferred.Iron, although not called for in a large percentage of cases, will sometimes prove of great service in the weak and anaemic subjects of hysteria.Chalybeates are first among the drugs mentioned by Sydenham.Steel was his favourite. The subcarbonate,or reduced iron,or the tincture of the perchloride,is to be preferred to the more fanciful and elegant preparations with which the drug-market is now flooded.Dialyzed iron,and the mallate of iron,however, are known to be reliable preparations,and can be resorted to with advantage.They should be given in large doses.A certain amont of real advantage,in giving tone to the nervous system,attaches to the zinc salts,particularly the oxide,phosphide,and valerianate;the nitrate or oxide of silver,the ammonio-sulphate of copper,ferriferrocyanide,or Prussian blue.

In a large number of cases of grave hysteria valuable results may be expected to follow the employment of the treatment by seclusion,rest,massage,and electricity,which Mitchell has done so much for to make popular.Playfair (The Systematic Treatment of Nerve-Prostration and Hysteria,1883) says correctly that if this method of treatment is indiscriminately employed,failure and disappointment are certain to result.The most satisfactory results are to be had in the thoroughly broken-down and bed-ridden cases.It is only the doubtful cases that are apt to give disappointment;and he remarks that the "worse the case,the more easy and certain is the cure".The process of massage to be employed in hysteria is well and practically described by Mitchell (Fat and Blood,etc.)"An hour",he says,"is chosen midway between two meals,and,the patient lying in bed,the manipulator starts at the feet,and gently but firmly pinches up the skin,rolling it lightly between his fingers,and going carefully over the whole foot;then the toes are bent and moved about in every direction;and,next,with the thumbs and fingers,the little muscles of the foot are kneaded and pinched more largely,and the interosseous groups worked at with the finger-tips between the bones. At last the whole tissues of the foot are seized with both hands and somewhat firmly rolled about.Next,the ankles are dealt with in the same fashion,all the crevices between the articulating bones being sought out and kneaded,while the joint is put in every possible position.The leg is next treated - first by surface pinching and then by deeper grasping of the areolar tissue,and last by industrious and and deeper pinching of the large muscular masses,which for this purpose are put in a position of the utmost relaxation.The grasp of the

muscles is momentary, and for the large muscles of the calf and thigh both hands act, the one contracting as the other loosens its grasp. In treating the firm muscles in front of the leg the fingers are made to roll the muscles under the cushions of the finger-tips. At brief intervlas the manipulator seizes the limb in both hands and lightly runs the grasp upward, so as to favour the flow of venous blood-currents, and then returns to the kneading of the muscles. The same process is carried on in every part of the body, and especial care is given to the muscles of the loins and spine, while usually the face is not touched. The belly is first treated by pinching the skin, then by deeply grasping and rolling the muscular walls in the hands, and at last the whole belly is kneaded with the heel of the hand in a succession of rapid, deep movements, passing around in the direction of the colon". The process of massage, which Mitchell so well describes, is in some cases combined with the Swedish movement cure. In the movement cure one object is to call out the suppressed will of the patient. This is very applicable to cases of hysteria. The cure of cases of this kind is often delayed by using massage alone, which is absolutely passive. The movements are sometimes spoken of as single and duplicated. Active movements are those more or less under the control of the individual making or taking part in them, and they performed under the advice or direction, and sometimes with the assistance, of another. They proceed from within; they are willed. A person's biceps may be exercised through the will, against the will, or with reference to it. Passive movements come from without; they are performed on the patient, and independently of her will. She is subjected to pushings and pullings, to flexions and extensions, to swingings and rotations, which she can neither help nor hinder. The same movements may be either active or passive, according to circumstances. One in which only a single person is engaged is a single movements; speaking medically, single movements are those executed by the patient under the direction of the physician or attendant; they are, of course, active. Duplicated active movements require more than one for their performance. In these the element of resistance plays an important part, The operatore, with carefully considered exertion, performs a movement which the patient is enjoined to resist, or the latter undertakes a certain motion, or series of motions, which the former, with measured force, resists. Still, tact and experience are here of great value, in order that both direct effort and resistance should be carefully regulated and properly modified to suit at the requirements of the case. It is wonderful with what ease an expert operator can exercise some of the smallest muscles. By changing the position of the patient, or the manner of operating on her from time to time, any muscles, or gropps of muscles, may be brought into play. In connection with massage in hysterical patients it is the duplicated movements which are most frequently performed or attempted. The very essence of this treatment is to call out that which is wnating in hysteria, i.e., the will-power. As the patient exerts her power the operatore should

yield and allow the part to be moved.The treatment is that of coaxing and insinuation,and one that will enable the operator to gain control of the patient in spite of herself.In hsyeria,as in other diseases,much of the value of massage and Swedish movements is self-evident. Acceleration of circulation,increase of temperature, direct and reflex stimulation of nervous and muscular action,the promotion of absorption by pressure,-these and other results are readily understood.Ultimately the nutrition of the nerves and muscles is augmented; for the proceedings in question exert and influence which consists,no doubt,in occasioning frequently-repeated voluntary excitations of the nerves and muscles, so that the act of conduction to the muscles is gradually rendered more facile.

The improvement of the circulation and condition of the muscles,in the first place,and to make the patient use the muscles,in the second place,are the objects of the electrical treatment,which are,therefore,much the same as in the case of massage and duplicated active movements.The faradic battery should be employed in these cases,and the patient should be in a relaxed condition,preferably in bed.A method of electrical treatment,introduced some years ago by Beard and Rockwell, is known as "general faradization",and it can sometimes be employed in one's consulting room.In this method the patient is placed in a chair with his feet on a large plate covered with chamois-skin;the operator then takes hold of the patient's hand,and the muscles of the neck, back,trunk,and limbs are passed over with the other electrode.This method has to be modified when the patient is in bed;and then the best treatment is by direct muscular faradization,the whole body being gone over in the course of thirty minutes or so.Two sponge electrodes are employed.The sponges are moistened,so that the current may pass through the skin and reach the muscles.Both electrodes are taken in one hand,the handle of one,pointing backwards,being between the first and second fingers,while the handle of the other is between the third and fourth fingers.In this way the distance between the points of application can be readily altered.Beginning with the muscles of the feet,the current is taken to all the muscles of the body.

Many authorites have dwelt upon the benefits of hydrotherapeutic procedure in hysteria,some especially advising the systematic external application of cold water.Chambers advocates the daily morning use of shower-baths,holding that the bracing up of the mind to the shock of a cold shower-bath is a capital exercise for the weak will-poer of the hysterical individual; and some excellent results have been reported by Charcot in inveterate neurasthenics and hysterics.Hydrotherapeutic treatment,continued perseveringly for a long time, "diminishes the extreme impressionability",says Rosenthal,"of hysterical patients,strengthens them,and increases their power of resistance to irritating influences, stimulates the organic functions,combats the anaemia, calms the abnormal irritability of the peripheral nervous system,and by diminishing the morbid increase of reflex power relieves the violence of the spasmodic

symptoms".He adds that under this plan one may sometimes cure even chronic forms of hysteria which are combined with severe paroxysmal convulsions.The water-treatment may be combined with that of seclusion,rest,massage, and electricity.Undoubtedly,one class of hysterical patients is greatly benefited by the latter method systematically carried out;these have been already described.In other cases,however,this method of treatment is useless;in some of them it has a tendency to prololong or aggravate the hysterical disorder,while in some cases a well-managed hydrotherapeutic treatment will answer admirably.This is applicable in hysterical patients who eat and drink well,who,as a rule,preserve a good appearance,but whose mind and muscles are equally flabby and out of tone,and need to be stirred up both physically and mentally.Warm baths,of from one to two hours' duration,are recommended by Dujardin-Beaumetz,who thinks that infusions of valerian increase their efficacy.It is advisable to remove patients from their family surroundings in order to obtain the most satisfactory results from hydrotherapy,which,again,is more efficacious when conducted at a well-regulated institution,for several reasons.Measures,troublesome in themselves,are here cariied out as a matter of daily routine.Numerous patients permit of the employment of competent attendants.The change is often of great benefit.The close personal supervision which hysterical patients are likely to have in an hydrotherapeutic establishment is also to be taken into consideration. Although a fair share of the good which results can be attributed to the water treatment,better modes of living,proper forms of exercise,regulated diet,etc.also enter.Notwithstanding the fact that it is better to remove hysterical patients,for hydrotherapeutic as well as for other treatment,from their family surroundings, and to place them in some well-regulated establishment, it is not by any means impossible to carry out such treatment in private practice,particularly in a house supplied with a bath-room.Many of our hydrotherapeutic institutions are in thehands of charlatans,or of individuals who are not practically well fitted for their work.Not infrequently,however,good results are obtained even under such circumstances.Much more can be done in this direction with modest buildings and appliances than is generally supposed.It is not necessary to have numerous apartments;three or four rooms in a well-appointed house,if the arrangements for carrying out the hydrotherapeutic treatment are of a proper kind, will suffice for a large amount of good work.In almost every house provided with bath-rooms with hot and cold water,some useful hydrotherapy may be attempted.The spinal douche can be used by placing the patient in a sitz- or ordinary hip-bath,and pouring the water from a spout or hose held at a certain height,the distance being regulated according to the patient's condition.Again, the patient sitting in a tub,water can be poured upon her,beginning at first with a high temperature,and gradually lowering it.The shower-bath may also be used. An extemporaneous shower-bath may be provided with a

watering-pot of the ordinary construction. Whole, three-quarters, or half baths can be given. One method of carrying out the wet-pack is very simple. A comforter is placed and spread upon the bed; next to this is placed a woolen blanket, and over the blanket a wet linen sheet, upon which the patient rests, with the head on a low pillow. The wet sheet, blanket, and conforter are then wrapped closely about the patient, bottles of hot water being placed at the feet. The cold drip-sheet consists in placing about the patient, while sitting or standing up, a sheet wet with cold water, and then vigorously rubbing her through the sheet. It is a method that is easily employed. In some cases baths are applied to the head, especially cool ones. For some forms of insomnia, or some of the disorders of sleep in hysteria this treatment is a valuable auxiliary to other methods. One way to use these baths is to have the patient lie in such a position that the head projects a little beyond the edge of the bed, and over a basin or receptacle of some kind. Water, of a suitable temperature, is then poured gently, or squeezed out of a sponge, over the head. Cold compresses may be used along the spine in cases of hysterica lspine. On the other hand, hot fomentations are of benefit in some cases. Hot applicati ons or frictionsmay be used if the hands and feet are cold. L˘cal hydrotherapeusis will be of service for certain câses of the vaso-motor disorders of hysteria, such as cold or hot feet, flushings, etc. In neuralgias, and other painful disorders locally of hysteria, frictions, fomentations, Turkish or Russian bathsmand the wet pack are often beneficial. In hysterical contractures local stimulation by the douche method, or by the steam bath, will be of service. For the excitable rectum cold enemata, in small quantities, so as not to be expelled, will be found to be very efficacious. For spasmodic attacks, whether purposive or involuntary, the use of the wet-pack, or the plunge-bath, will sometimes be found of service. Hydrotherapeutic measures will be of added service when hysteria is complicated, as it very often is, by disorders of the liver and stomach. L˘cally sitz-baths, hip-baths, douche-baths, hot and cold injections, and foot-baths may act as revulsants, astringents, or local tonics, while at the same time they are measures which act upon the system as a whole to strengthen it. When hysteria is associated with genito-urinary disorders, even though the latter are not regarded as the cause of the former, special beneficial effects, both local and general, can be obtained from hydrotherapeutic measures. In a few cases one may combine with the external treatment the internal use of large quantities of either hot or cold water, or of the ferruginous mimeral waters. If we can induce hysterical patient to go to the seaside for the purpose of bathibg in the sea, all the better, for it is almost sure to do them a considerable amount of good. Indeed, few measures are better calculated to bring up the tome of the nervous system of an hysterical or neurasthenic patient than well-directed sea-bathing. Where sea-bathing cannot be employed, sea-water may be used indoors. Sea-water establishments, where baths at

various temperatures may be had, are now to be found at the best seaside resorts.

A change of climate is usually beneficial in cases of hysteria, a dry mountian air being preferable, as also sea air, to any other.

Hypnotism has been said to be curative in cases of hysteria, especially by Richer and Braid, the former curing several and the latter sixty or seventy. This list undoubtedly includes some hysterical cases, -of paralysis, anaesthesia, aphonia, blindness, and deafness, as well as spinal irritation, and other phenomena. Hypnotism should, however, be resorted to in cases of mental or motor excitement; for in some cases of hysteria I am of the opinion, on theoretical grounds, that the practice of hypnotization may be absolutely injurious.

For the treatment of the hysterical convulsions some say that interference is not necessary, care being merely taken that the patients do not sustain injury in consequence of the convulsive movements, and that respiration is not impeded by their clothing. Rothrock (Phila. Med. Times., 1872-73, iii., 67) reports several cases relieved by the application of snow or ice to the neck. The applications were made up and down either side of the neck along the line of the sterno-cleido-mastoid muscles. He believed that the most probable explanation of the results obtained was the shock received from the cold substance, but that supplemental to this there may have been supplied through the vagus nerve a respiratory influence. This measure, and the use of the cold spinal douche are both of service in certain cases. Some have reported benefit from the use of emetics. Miles (Clin. Med. Reporter, 1871, iv., 25, 27) reports several cases of severe hysterical seizure in which tobacco was promptly efficient in controlling the affection. He used it in the form of a wine, in doses of one drachm every half hour, until the system was relaxed and nausea induced, the effects being usually pronounced after taking three or four doses. Fifteen grains of sulphate of zinc may be used in adult cases. For a case of hysterical coma Allen used an hypodermic injection of one-tenth of of a grain of apomorphia. Nitrite of amyl inhalation sometimes cuts short the seizure. Stopping the respiration, by holding the nose and mouth for thirty or forty seconds, will often arrest the fit, and dashing cold water over the face and neck will sometimes succeed, but in obstinate cases a cold-tub-bath will be necessary. Deep pressure over the ovaries is said to stop a fit, but I have never seen the procedure succeed. Aphonia is often cured by faradism, or by drawing sparks from the skin over the larynx with the static machine. Mitchell recommends that a patient with aphonia be instructed to speak only when the lungs are filled after a full inspiration, and this method is sometimes attended with striking benefit. Ovarian tenderness usually disappears after careful and skilful massage. The tenderness in the ovarian region is probably not in the ovary, for hysterical men sometimes complain of pain in the same region. Sometimes a succession of small blisters cures the pain in this locality when all other means have failed.

Operations upon the ovaries are seldom justifiable. A number of cases of cures of hysteria have been recorded after removal of the ovaries, but the result was probably due in everycase to suggestion. Some of worst and most intractable cases of hysteria have been seen to follow removal of these organs. The operation of oöphorectomy is a perfectly legitimate procedure in cases of extreme dysmenorrhoea, associated with severe hysterical attacks at every menstrual period, which are not relieved by a proper course of rest treatment. Braun, of Vienna, reports excellent results from the exhibition of, in cases of hysterical convulsions during pregnancy, an enema of asafoetida, the yolk of an egg, and water. Pressure of the arteries and other structures at the root of the neck, on either side, is a procedure which Fagge (Brit. Med. Jour., Mar. 27, 1880) says he has often seen Stocker use with success.

We have seen that in hysterical paralysis faradism and galvanism are to be commended: anaesthesia very often yields to the use of the metallic brush electricity. In all cases in which it is possible to coax an organ or part to perform its usual function, long unperformed or improperly performed, means should be directed to that end, i.e., in cases of local hysteria, particularly of the paralytic, ataxic, and spasmodic forms. Thus, as I have already mentioned, Mitchell has shown, in some cases of aphonia, especially in those in which the loss of voice is due to the dissociation of the various organs needed in phonation, by teaching the patient to speak with a very full chest an involuntary success in driving the air through the larynx may sometimes be secured. The oesophageal paralysis forthwith begins to vanish, once we can compel the patient, by firm but gentle means, to swallow. In hsyterical contracture Fagge says he has seen more benefit from straightening the affected joint under chloroform, and placing the limb upon a splint, than from any other plan of treatment. Huchard (Rev. de Therap., June, 1883) says that he was able to entirely relieve, by the application of an elastic bandage, an hysterical contracture of the forearm. Hammond (Phila. Med. Times, vol. ii., Nov. 25, 1876) reports a case of supposed hysterical contracture, in the form of wry-neck, in which he divided one sterno-cleido-mastoid muscle; immediately the corresponding muscle of the opposite side became affected; he cut this; then contraction of other muscles took place, which he kept on cutting. The case was given up, and got spontaneously well about two years later. Risel, of Messeberg (Allg. Med. Centralzeitung, Oct. 9, 1878) said he had to chloroform one lady for eight days, and another for fourteen days, at every access of the cough; and in similar cases some authors have had to resort to amyl notrite. Reposition of the displaced uterus was the means of Graily Hewitt (Med. Press and Circular, June 2, 1880) being able to cure a case of hysterical vomiting which the anomaly in question had induced. The same authority, in a paper read to the London Congress, advanced the opinion that the exciting cause of attacks of hysteria and hystero-epilepsy was a distorsion of the uterus, produced by a flexion of the organ upon itself,

either forward or backward.He believed the attacks were the result of reflex irritation.He recited eighteen cases,all of which were relieved.Flechsig (Neurol.,7 Abt.,1885,Nos.19,20)favours the gynaecological treatment of the uterus,including castration and removal of the ovaries.He reports three cases with good results. His article favours the idea that any morbid condition of the genital organs present ought to be remedied before treating the hysterical symptoms.Zeuner (Jour. Amer.Med.Assoc.,1883,i.,523-525),on the other hand, refers to a number of cases in which gynaecological treatment gave either entirely negative results,or was productive of positive injury to hysterical patients. He quotes Perreti (Berl,klin.Woch.,No.10)physician to an asylum for the insame,who gives the details of a number of cases in which gynaecological examinations or treatment were directly productive of injury.He mentions a case of a female patient who had delusions and hallucinations,of a sexual type,in which the physician was the central figure.He reports cases in which proper constitutional treatment,without gynaecological interferences,led to a full recovery.Other points in the treatment of hysteria have laready been included in preceding sections,and need not,therefore,be here recapitulated.

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